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HUGH OWEN THOMAS.¹

By A. R. HAMILTON,
Sydney.

In presenting this presidential address I am fully conscious of its importance and of the honour it confers upon me.

Rather than select a specific subject, I felt it would be opportune to try to condense the writings of Hugh Owen Thomas. However, such a paper will fail to portray the full stature, the lucid reasoning and the meticulous composition of this master of orthopaedic surgery. What a joy it is to read Thomas's "Contributions" from which this paper is compiled. For the benefit of the younger generation, one must recall that Thomas was a general practitioner who did not have the benefits of X-ray machines, of pathologists or of biochemists, or even the advantages of a public hospital for his work.

You will forgive me if I present this paper in the first person in order to avoid repetition, and in view of its scope I must abbreviate the subject matter by confining myself to quotations, axioms and very condensed discussions.

Principles of the Treatment of Diseased Joints, 1883.

The mode of practice in the cure of joint disease still remains varied and divergent, and surgeons soon entrench themselves behind a specialty of practice from which no amount of reason or of evidence is likely to dislodge them. There has been of late years a tendency to make the treatment of articular disease more and more a specialty as a large number of practitioners dread the responsibility that defect may remain after treatment, the defect frequently being suspected to arise from maltreatment.

There are no principles especially applicable to the treatment of articular disease which do not apply to all diseases.

Recently, surgeons have advocated the treatment of articular defects by a method of adventure, namely bone-setting, and consisting of certain flexions, extensions, twists, jerks and pushes of the joints with passive motions and other details, whilst the treatment the sufferer is most in need of, he seldom meets with—the treatment of no motion. Unhealthy joints require immobility as far as it is practicable, and when soundness of the joint has been secured, non-interference is indicated.

Definitions of Various Joint States.

1. A healthy joint is a normal joint.
2. An inflamed joint is one whose radius of action is gradually diminishing under otherwise normal conditions; this diminution tends to increase as long as the joint is

¹ President's address, read at the annual meeting of the Australian Orthopaedic Association, Adelaide, August 15, 1957.

unsound. An inflamed joint may or may not be accompanied by effusion in the joint.

3. An ankylosed, inflamed or unsound joint is one in which some signs of inflammation remain, and in which no motion can be detected; this rigidity may arise from the lack of pliability of the capsule and its surroundings or from osseous adhesions between the adjacent bones. All forms of unsound ankylosis should be classed as false ankylosis, since the fixed deformity of such joints increases with use.

4. A true ankylosed joint possessing sound articulation is one in which no trace of inflammation remains, and in which ordinary daily use cannot cause any variation of position.

5. A sound joint is one in which all inflammation has subsided, and whose radius of action gradually increases; this is an infallible sign of soundness and a justification for removal of all restraint or for surgical interference.

6. A deformed joint occurs when the final position of a joint which has been inflamed deviates from the optimum for that particular joint. Inflamed joints relapse because treatment is suspended before soundness of the articulation has been secured.

There are two classes of joint defect: first, articulations which are diseased; secondly, articulations which are sound but are hampered by practical defect and are deformed in regard to usefulness. In the first class of joint defect inflammation is present, with one or more of its gradations *plus* deformity, and in the second class must be included congenital and non-congenital deformities which are not caused by inflammation, *plus* deformities which are the only remaining indication of a past inflammation.

Treatment of the first class, consists, without exception, of the most perfect and continuous practical immobility of the joint as long as unsoundness exists. A joint so treated cannot suffer any permanent defect which is otherwise avoidable, even though the treatment is continued beyond the period of soundness. In the treatment of the second class, principles of treatment are exactly the opposite to those suitable for the first class. Unsoundness of the joint must first be induced, and means are used to maintain the unsound state until the desired position has been gained; then the principles outlined for the first class of condition are applied, and in this way a sound joint is regained, and the amended position will become a permanency.

Thus most joint deformities can be corrected without tenotomy, except some deformities of the foot. The more completely an unsound joint is maintained at rest, so that friction is avoided and pressure is removed, the sooner it will recover. An unsound ankylosis is just as liable to retrogression as is an unsound joint after motion.

Deformity, an inevitable accompaniment of joint disease, is evidence of Nature's attempts to secure rest by fixation of the joint and is Nature's mode of immediate help; ankylosis is Nature's reserve assistance. Deformities are avoidable, and ankylosis is in no instance to be desired, although in the presence of certain conditions it is unavoidable; yet it is an unmitigated evil, which cannot be said always to arise from improper treatment, as the more efficient the treatment may have been, the less the probability is that any ankylosis will remain.

The principles which ought to guide us in the use of means to bring about the resolution of articular disease are equally applicable to protection of the articulation from practical deformity. The same principles, if they guide the treatment, should also diminish the prospect of ankylosis, which is Nature's method of fixing a joint more efficiently than by muscle spasm, in order to bring about resolution of the disease.

A stiff joint is not necessarily an ankylosed one; a joint may be stiff, yet be truly normal. True ankylosis is one which does not vary by test or use, whereas a false ankylosis will not remain immovable by either test or use, and so long as false or unsound ankylosis is present, there is always a chance of recovery of complete or some motion

by use alone some time after the unsoundness of the joint has been secured. In the absence of true ankylosis, the amount of motion in a joint when disease is arrested must increase, but if it decreases with time and use, it must have been unsound when the treatment was suspended. The amount of motion conserved depends upon the efficiency of uninterrupted fixation. Tremor helps to produce ankylosis or to make it permanent. Ankylosis is developed in proportion to the intensity of the inflammation present. Mechanical rest of an inflamed joint is the first consideration, after which therapeutics and surgery can be used. Rest of a joint will not produce true ankylosis; no facts support the prevalent dread of rest.

When an articulation has become sound, all the causes which tend to produce ankylosis have ceased to exist, so that a joint cannot become more ankylosed in 30 years than it was in 30 days after the resolution of the disease.

Rest of a normal joint can produce capsular contraction, whilst adhesions and ankylosis can be caused only by trauma to or disease of the joint.

For example, suppose the tarsal joints, though uninjured, remain stiff and painful after the treatment of a fractured tibia; if they are sound the stiffness and pain will leave by use; and should these symptoms arise from contraction of the *tendo Achillis* because of the retention of the foot in plantar flexion, then the position, not rest, is to be blamed.

Long disuse of joints, even without disease, may stiffen but not ankylose the joints of very old persons, but certainly not of young or middle-aged subjects; stiffness is not a defect that demands the aid of a surgeon, for use will correct it.

Circular compression of a joint cannot rightly be termed rest of that joint. Immobilization of a joint by means of circular encasement with plaster of Paris may lead to the ulceration of articular cartilage through pressure, a form of motion or by its weight and means of application. This may so interfere with the nutrition of the joint that it may be seriously damaged.

The ideal rest for an inflamed joint cannot be obtained in practice. Whilst the best modes known to us give nearly perfect physical rest, they induce some physiological disturbance which is simulative of disquietude. Rest should be provided by attaching controlling appliances to the sound portions of the limb, and not to the diseased part, as pressure on the diseased area promotes the progress of the disease, results in long delay in recovery and often leads to excision of the joint or to amputation.

Compression of the sound parts of the limb above and below the diseased joint induces some slight physiological interruption or stasis of the circulation in the parts surrounding the joint; in some cases it will tend to produce false ankylosis, and possibly in very rare cases to produce true ankylosis of the joint. On the other hand, any other method of fixation or no fixation will increase the probability of permanent defects. In order to reduce this stasis, the basis of support for the limb should be made greater in diameter than that of the limb, so that the encircling bands can then exert their retentive force only anteriorly and posteriorly, thus allowing a free lateral circulation. Some degree of stasis thus induced in parts surrounding the diseased joint is instantly beneficial, as it acts as an even circular support of the joint without injurious compression.

The test of recovery of a diseased joint after treatment is as follows: If the articulation during the acute condition has not been damaged, then, although the limb has been retained at rest during treatment, motion at the articulation may be observed to be gradually increasing, or should the normal joint structure have been much altered, then if the limb was tested by a period of use, there would be no alteration of the form in which the limb was held while under restraint.

Never test for the existence or probability of motion while disease is obviously active, for the following reasons: (I) So long as the unsound condition obviously exists, there may be very perceptible motion, but it may be lost by the time resolution has been established. (II) During the unsound condition there may be very slight or no

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motion perceptible, but when resolution has been secured motion may be acquired. (iii) Any knowledge with respect to the mobility of the joint during the unsound state does not aid the diagnosis, the prognosis or the treatment. (iv) If a practical form of the limb has been maintained during treatment, and if that treatment has been correct, then motion will be restored to the joint if restoration of motion is possible; but if the articulation has become truly ankylosed, then this termination is an inevitable accompaniment of cure.

As a general rule, one month of uncontrolled use of a limb will give the required information as to whether the joint is sound or unsound. It may be laid down as a general and trustworthy rule that if any voluntary motion of a sound joint is present, then more motion will follow.

There are in general use other mechanical means for the treatment of diseased joints—for instance, counter-irritation, shampooing, passive motion and electricity. To the surgeon who has mastered the principles proper to the treatment of inflamed joints these terms can convey no useful meaning, as the operations which they imply are used to secure an end, an end which he would see they cannot possibly aid in obtaining. For the successful treatment of all degrees and phases of articular disease, the surgeon must possess an unbounded but intelligent confidence in the efficacy of rest as the foundation of all treatment.

Certain hard and fast rules also appertain to the treatment of deformities, both congenital and non-congenital. A better classification of deformities is: (i) deformities sound and (ii) deformities unsound. To correct a deformity, it is first necessary to render it unsound. Once the deformity has been corrected, the unsoundness must be converted to a sound condition by rest, as already described.

The structures maintaining the permanency of a deformity are: firstly, the fibrous expansions which radiate from the tendinous origins and insertions of muscles and which connect the true muscular structure; secondly, alterations in the form of and around the articular capsule and sometimes in the osseous connexion between the bones comprising the joint.

In the treatment of a sound deformity, tenotomy or forcible rupture of tissue may be necessary in order to bring the part into the condition to which gradual correction is especially proper. The surgeon who wrenches, twists or performs any adventurous manipulations enters upon a surgical lottery, and his chance of doing the patient harm is much greater than his chance of benefiting him. In the event of a slipped cartilage's not being reduced by manipulation, the joint should be immobilized for from four to six weeks, and permanent relief from this disability will ensue.

Involuntary muscular contraction is never an immediate symptom of injured joints, and can be met with only after an injury to a joint, or when disease in a joint has been cured, or when a joint has been a diseased joint for some time, although the disease is still present.

The practice of manipulating joints that are stiff from any abnormal condition of their muscles, after injury to or disease of the joint, is wrong in theory and in practice. The muscular stiffness which yields a little, as if with the giving of an elastic substance that instantly recoils, is a condition of a muscle in connexion with injury to or disease in joints, and is indicative of an unsound articulation. The more such muscles are subjected to force, the longer the joint must remain unsound; but when the muscles feel firm, steady and resisting—that is, passive but shortened—stiff joints, if sound, may in some rare instances be loosened by manipulation, but not without risk of injury to the joint.

To give the patient an anaesthetic when the first-mentioned condition of muscle and its attendant tender joint exist, would only make difficult a diagnosis of the actual condition of the joint, as it would obliterate the most important diagnostic symptoms and probably lead to what is termed manipulations, bone-setting, or passive motion, between which evils I am not able to perceive a difference.

During the past 26 years I have repeatedly tried manipulation to loosen joints crippled in their action, and have watched the practice of qualified and unqualified practitioners famed for their skill as manipulators of diseased and injured joints, and again I have been educated with a bias in favour of such treatment; yet, notwithstanding all this, unmistakable evidence of its evils has led me to discard it myself and to advise others to avoid the adventurous treatment recommended by the author of the lecture "On Cases that Bone-setters Cure". Suppose we grant at times that the treatment of defective joints by certain modes of manipulations could be of benefit, even then the discredit of crippling many patients far outweighs the credit gained by the relief of isolated cripples.

Manipulations of tender joints tend to produce ankylosis. I believe the more we know of the aetiology of joint lesions, the more seldom will sprains be treated by the manipulations of shampooing and passive motions, as to handle, rub or press the sprained part is to extend the first cause of the ailment, and to force a joint in the direction opposite to that in which it was forced by the accident is to injure the joint or ligament. All reported cases of cures effected by rubbing, pressing or other manipulations, when their history is analysed, are found to be cases in which the extra time during which these performances were acted was the real factor in the perfection of the cure.

Gradual and uninterrupted reclusion with or without extension will, in most cases, reduce any deformity if it is practical to use sufficient force. When the force required is greater than reclusion and extension combined can overcome, then we can generally, whilst the patient is under an anaesthetic, by the use of extra force in some other manner so far strain the part as to cause deterioration in its condition so that reclusion and extension may start off with the load.

Whatever amount of motion a soundly recovered articulation of a deformed limb possessed before its successful alteration, it will most certainly have at least this amount of motion in its new form, as soon as the unsoundness which is attendant upon the reduction of deformity has gone. If there was no motion before, there will be none after, and the part, if sound after the alteration of form, will remain permanently immovable and unalterable by use.

An artificial imitation of the process, which Nature follows when she strives to restore health and function to a diseased joint, ought to supersede the senseless main-force treatment advocated by the majority of surgeons of late years, which is a departure from the path along which our predecessors were advancing their treatment.

The qualification which is usually necessary to form "a natural bone-setter" is that the practitioner should possess a lying habit of declaring that every stiff or painful limb is "out of joint". Cartilages, tendons and even joints may not be in normal position, yet if they are free from inflammation and the parts are healthy, habituation is soon acquired and even perfect use of the joints may be regained, whereas more or less disablement is sure to last as long as the part is unhealthy, even if the structural relations are normal.

I have not yet seen an excised hip or knee joint recover or benefit from the operation, and although excision of the elbow joint may give an excellent result, it does not approach in utility a soundly cured and properly posed, even though ankylosed, elbow joint. A trustworthy rule is that the longer an articulation has been diseased, the more certain it is that the disease is curable—that is, the limb can be made sound so as to withstand the strain of use. Excision and amputation should be reserved for patients over 12 years of age, and for when the diseased joint has retrogressed after six to 18 months' treatment and is overtaking the patient's vitality. A limb after excision of a joint is as superior to an artificial limb as a limb cured in useful form, though with a defective joint, is superior to a limb from which a joint has been excised. Injured or diseased joints that can recover after excision can recover without excision, and joints that do not recover after excision ought to have been removed by amputation. Mortality from articular disease is greatest in the 15 to

30 years age group. People who suffer after this period generally require a much shorter period of treatment than even subjects whose ages may vary from one to 15 years; at least half the time is required, and there is scarcely any tendency to suppuration.

The Principles of the Treatment of Fractures and Dislocations.

Efficient fixation is essential for the restoration and repair of a fracture. Repair may be delayed or urged on according to the means employed. Too much elevation, compression of the limb and deficient immobility may cause delayed repair; compression and elevation are very often necessary evils to enable the surgeon to gain the nearest approach to the original symmetry. Repair may be easily urged on by permitting the limb to resume the perpendicular position, so favouring tumefaction, or by the use of interrupted compression—that is damming the blood circulation by circular compression above and below the fracture. Percussion of the fracture either alone or in conjunction with the damming of the circulation, may also be tried as a means to hasten union.

A fracture deformity which cannot be made right during the first day may be corrected during the following three weeks. If a fracture is in proximity to a joint, the limb ought to be so fixed that the utmost prospective usefulness may afterwards be gained, should the joint have also suffered an injury indirectly. It is not uncommon for even a recent fracture, especially if it is a compound one, to be at once drilled and wired or pegged as supplementary treatment, whereas ordinary mechanical appliances intelligently used would be better. This practice I hold to be a retrogression in the surgery of fractured bones. Even in delayed union of fractures actual interference, such as drilling and excising, will seldom be required, as in most cases they hinder rather than aid repair, and such operations should be reserved for old chronically diseased cartilaginous connexions only.

In my early practice, I excised fractures frequently for non-union, but now I do this rarely, as I am able to urge on repair. At the same time, it must be admitted that direct interference cannot, as yet, be utterly set aside in the treatment of fractures.

Of all fractures, those of the patella, olecranon and neck of the femur are most easily repaired and require the least mechanical skill in their management. The surgeon has only to avoid interfering with the natural tendency to repair and to so fix the injury that the patient does not unintentionally interfere with the progress of repair. In the treatment of fractures, the surgeon should select normal parts to be points of fixation, and should avoid compression of the fracture site. The essence of treatment is rest, and control of the fractured bones by gripping the sound parts, combined with fixed, rather than continuous, extension.

Fractures are injuries often of such a character that, no matter how much personal skill and mature experience may have been expended in directing their treatment, a defect in the full restoration of use of the limb may remain, the best of treatment having only diminished deformity. Many adopt a too mechanical view of the treatment, and imagine that a living limb can be fashioned as if it is composed of inorganic matter. A fracture that threatens to become a compound one is benefited by a short delay in reduction in order to allow a moderate amount of swelling to set in so that the skin may escape being punctured by the fracture. Very violent attempts at perfectly setting a fracture are seldom advisable. In the treatment of joints contiguous to fractures, it may sometimes be advisable not to fix them. It is seldom advisable to fix the elbow, especially if the fracture of the humerus is not a compound one. As a rule, the reduction of both dislocations and fractures is frequently facilitated by the use of force in a direction which aggravates the deformity; thus we may evade much muscular resistance.

The confining of a lesion in plaster of Paris or in compressing bandages is not rest, but is the opposite of it, and it is a method of starving and injuring a diseased part which is already below the normal standard of vitality. Compression, even if it is combined with immobility,

cannot strictly be defined by the phrase actual rest. The repair of fractures can be hindered by immobility, but be encouraged by actual rest.

As a result of extensive experience it can now be asserted that percussion, damming of the blood circulation and fixation of fractures will cure delayed union in most cases. Percussion is performed with a rubber-faced mallet or hammer, the skin being protected with a layer of felt. Mild, moderate or heavy percussion is applied to the area of the fracture; this area is dammed by the application of a rubber band above and below it. Heavy percussion is carried out while the patient is under an anaesthetic, and it can be repeated monthly if required; mild or moderate percussion is performed every two, three, four or seven days without the use of anaesthetics. Moderate weekly percussion of the lateral condyle of the femur for from five to 10 months has been successful in preventing patelae from slipping laterally during the knee flexion.

More than one attempt may be required to reduce a dislocation that has become well set in an abnormal position some weeks after it has been sustained. If the first attempt is unsuccessful, the chance of reduction during a second attempt is more than doubled provided that too long an interval between the attempts is not allowed. The force of resistance is on the second or third day after the primary trial diminished by at least one half. At the same time, the principles applicable to the treatment of deformities and fractures are necessary. The principles of after-care of a dislocated joint are the same as those applicable to a diseased joint.

A simulated reduction of a dislocation may give a better result than an actual reduction would have done, especially if the displacement was long existent. Correct replacement of a dislocation is not a warranty that perfect use must follow. Functional position, and in most cases an increase in the range of motion, can be restored to old, unreduced dislocations of shoulder, elbow, hip, ankle and other joints by performing a simulated reduction of the dislocation and then by treating it with rest until soundness has been obtained. In some such cases, two or three attempts at correction at four-day intervals may be required before the desired position is obtained. In the case of the hip joint, it is usually necessary to fracture the femur in the region of the trochanters.

Many cases of fracture resulting from malignant disease involving the bone unite, if adequately fixed by splinting.

In the case of fractured ribs, and of compound fracture of the thigh or the leg after amputation, the diet should be restricted so as to avoid as much disturbance as possible, the act of defecation being the greatest annoyance during the first fortnight. The following régime should be followed until the first or second spontaneous action of the bowels takes place from 10 to 14 days later: breakfast, bread and butter and tea; lunch, fresh broth—no solid food; evening meal, biscuit and butter and tea; supper, arrowroot made with water, some brandy and nutmeg.

The rules I follow have enabled me to gain my purpose more quickly and safely in most cases of deformity without recourse to operation, even to the relatively safe tenotomy. The same rules have led me to a successful mode of treatment of lesions of the skeleton so that, while decreasing defects, it left no qualifying trace of the treatment, which is more than can be said of our major operations for the relief of deformities and diseases of the bones. Operations, if at times proper and a gain on the whole in comparison with the antecedent condition of the patient, leave a qualifying defect, consequently any knowledge that will enable us to dispense with them more often will be welcome.

Nearly all members of our profession will very probably have had the unpleasant experience of being annoyed by captious patients or by their friends, irreconcilable individuals, who from their constitutional formation are always in a state of dissatisfaction. One of these irreconcilable persons once fell into my hands, but soon transferred his confidence to a surgeon who had overlooked a dislocation in a previous case. However, in transferring his patronage, my late patient did not utterly cease to communicate with me, inasmuch as an epistle was sent to me

by his attorney, but it so happened that I was equal to the occasion. Experience pointed out to me who it was who had probably inspired my late patient to give me this unwelcome attention, so I addressed a homily to the covert person, not the first addressed to him during the last 20 years, which was so effectual that the captious man neglected me for a time, but finally visited me and expressed his regret at having annoyed me.

During the period of the action of the foregoing episode, a man with an injured elbow was contemplating again troubling his late surgeon with a legal claim for malpractice, and he consulted me regarding the feasibility of the claim. My answer banished the idea from his mind. It was not the first time that I had been obliged, from a sense of fairplay, to protect this gentleman from whom I had never received such protection, even in reciprocity.

My contention has always been that a practitioner behind a litigious patient is in a very dangerous and pitiful position, so placed that, if he is not exceedingly prompt in justly performing his duty to his neighbour, he ought to be suspected of performing it as an adherence to etiquette, rather than as a homage to equity.

Permit me to end this paper with a verse from Ecclesiastes:

Is there anything whereof it may be said, See, this is new? it hath been already of old time, which was before

—ECCLESIASTES I : 10.

TRICHLORETHYLENE.

By T. P. CRANKSHAW, D.A., F.F.A., R.A.C.S.,
Melbourne.

EXPERIENCE in the use of any anaesthetic agent can be obtained only by observation and repetitive effort by the individual, combined with careful assessment of all we read and hear on the subject. Reports on trichlorethylene have been appearing for the past 20 years.

At Prince Henry's Hospital, Melbourne, over the past two years, we have been using trichlorethylene more frequently than formerly. During this period we have established a post-anaesthetic recovery room, where we hold patients until they are conscious and can safely be transferred to the ward by the lift. Observation of these patients, and criticism of the anaesthetists by the recovery room staff when the patient's return to consciousness is slow, have shown us that very low concentrations of trichlorethylene may be used for maintenance. This observation is well supported by recent papers published on this subject.

Trichlorethylene has been in and out of favour for many years. It was first described in 1864, and became widely used in industry as a fat solvent and cleansing agent. Its application to clinical anaesthesia followed the observation of its effect on workers exposed to the vapour. As early as 1915, its poisonous properties and power to produce analgesia, particularly in the distribution of the fifth cranial nerve, were well recognized. Later evaluation showed that the relief produced in cases of trigeminal neuralgia was based on the marked general analgesic properties of the drug.

In 1934, Dennis Jackson described its general anaesthetic effects, and in 1935, Striker used it to anaesthetize 300 patients. Nothing further was reported until Langton Hewer published 400 case records in 1941. He showed great enthusiasm regarding its use as an anaesthetic agent. As a result of Hewer's account, the drug gained a considerable degree of popularity.

The physical properties are generally well known, but, for completeness, I must recapitulate the main features. The liquid is colourless, but has waxoline blue added to distinguish the drug from chloroform, as both substances have a similar smell. The liquid boils at a temperature of 87° C., which is 60° C. higher than the average room temperature, and so has a very low degree of volatility. This is offset by the very high potency of the vapour in low

concentration. The vapour is approximately four and a half times heavier than air. The molecular weight is 130, so the rate of diffusion, and therefore elimination, is slow. The liquid is scarcely soluble in water, but is very soluble in oil. It is non-inflammable and non-explosive, even in oxygen, at normal room temperatures.

A theoretical objection to the use of trichlorethylene for cauterity to the air passages is that phosgene and chlorine are formed. This is true, but the amount produced is so very minute that no clinical effect can be demonstrated. Incidentally, this decomposition also occurs when chloroform is similarly used. A 0.01% solution of thymol is added to retard decomposition, but it is recommended that any excess after its use should be discarded. The drug is very irritating to the skin, and dermatitis may follow its industrial use.

It is of interest to note that Imperial Chemical Industries first produced "Trilene" in 1936, as a pure form of trichlorethylene for use as a solvent to clean dirty wounds and burns. It was this form of the pure drug which Langton Hewer used in his work.

In 1944, the *British Medical Journal* devoted an editorial to what it called "The Trilene Hazard". Until then it had not been realized that trichlorethylene decomposed when used in a closed circuit with soda lime. When the temperature is raised above 15° C. in combination with alkali, dichloracetylene—a toxic substance—is produced.

In 1944, Humphrey and Margaret McClelland and, independently, Carden produced reports of a total of 17 cases of cranial nerve palsies which developed after general anaesthesia. In two of the cases reported by Humphrey and McClelland, the patients had died, and at least four other fatalities were known to have occurred. In all these cases a closed circuit apparatus had been used, and despite the fact that in 13 out of the 15 cases described by Humphrey and McClelland trichlorethylene had not been given as the anaesthetic, the notorious reputation of the drug as a noxious agent led to its being suspected as the cause of the deaths of the patients. It was proved experimentally, that when trichlorethylene is passed over soda lime, dichloracetylene is formed. It was also shown that this substance is highly toxic to rabbits, causing death with convulsions and gross histological changes in the brain, the liver and the kidneys.

Although trichlorethylene had not been specifically administered to a number of these patients, this was the only drug plus soda lime which could be incriminated, on the assumption that it could have persisted in the machine used or in the soda lime between the anaesthetics in which it was used. It was indisputably proved to be the correct assumption, as after the combination of trichlorethylene and soda lime had been given up no further cases of palsies were reported.

In the above-mentioned cases, the fifth and seventh nerves were most commonly involved, but interference with the third, fourth, sixth, tenth and twelfth nerves has been reported. These lesions were sometimes permanent.

Delay in the patient's recovering consciousness was also described. This would appear to be due to overdosage or toxic decomposition of the drug.

The following account is a review of the literature since the reintroduction of trichlorethylene to clinical anaesthesia by Langton Hewer. In a letter to the *British Medical Journal* in 1945, Hewer pointed out that trichlorethylene was an admirable agent for maintaining light anaesthesia when complete muscular relaxation was not required. Minute quantities were necessary for maintenance—a few minims per hour. The characteristic smell should be just perceptible. He pointed out that arrhythmias were not more common with trichlorethylene than they were with other inhalational agents. He stated that work with an electrocardiograph suggested that the only arrhythmia of any consequence was multifocal ventricular tachycardia, which in the case of chloroform was known to be occasionally followed by ventricular fibrillation.

This type of arrhythmia occurs in about 10% of patients anaesthetized with cyclopropane and trichlorethylene. Primary cardiac failure is almost unknown with either

agent, but it seems reasonable to take the pulse irregularities seriously, and to recognize them as a sign of overdosage.

Hewer further stated that after using trichlorethylene for many years, he had yet to see serious harm result, but it was essential to recognize and respect its limitations. It seems clear from more recent electrocardiographic studies that variations in cardiac rate and rhythm depend largely on the concentration of the vapour employed. In lighter planes, sinus bradycardia and occasional premature contractions are commonly observed, while in deeper planes, more significant alterations are seen. In every case of ventricular fibrillation, this is preceded by multifocal ventricular tachycardia. It is important to remember that adrenaline can convert multifocal ventricular tachycardia to ventricular fibrillation and should therefore be administered with great care. A raised blood carbon dioxide tension increases the incidence of arrhythmia during trichlorethylene anaesthesia, whereas the use of pethidine appears to have the opposite effect.

In 1948, Gordon Ostere reported on 40,000 administrations of trichlorethylene over a period of seven years. One-third of these were for induction of anaesthesia, while the remainder were for maintenance as well. In this series there were no fatalities or incidents of collapse which could remotely implicate trichlorethylene.

In 1946, Whitteridge and Bulbring suggested that sensitization of the pulmonary stretch receptors produced an increase in the depth of respiration. They stated that this was associated with a decreased pulmonary volume at the end of inhalation. Stimulation of the deflation reflex further augmented the rate of respiration and increased the amount of air retained in the lungs at the end of exhalation. Vagotomy abolished these effects. The respiratory rate was always raised to some extent, but rapid breathing must be considered to be a sign of overdosage.

Sudden respiratory arrest without tachypnoea has been described, and it calls for immediate curtailment of the administration of the drug and the institution of artificial pulmonary ventilation with a rapid flow of oxygen, so that diffusion through the alveolar membrane is accelerated.

Dundee, in 1953, suggested that when more thiopentone was used for induction, it reduced the likelihood of tachypnoea. This view is not held by Gilchrist and Goldsmith (1956), who consider that larger doses of thiopentone initially depress respiration; this depressed respiration is then more readily followed by reactionary tachypnoea, which, in turn, increases the amount of trichlorethylene absorbed. Pethidine may be used to correct tachypnoea, but should be used only after the concentration of the drug has been diminished. The dose of pethidine given intravenously should not be more than 25 milligrammes.

It has been stated that nausea and vomiting are less common with trichlorethylene than with ether. In 1945, Bridges Webb, of Melbourne, reported in *THE MEDICAL JOURNAL OF AUSTRALIA* that in a series he investigated at the Repatriation General Hospital, Heidelberg, 74% of ether administrations were complicated by post-anæsthetic vomiting, whereas the corresponding figure was 22% for trichlorethylene, and only 3% of these patients vomited more than once.

Recently, the effect of trichlorethylene on metabolism has been thoroughly investigated. The blood chemistry is not greatly altered, while the liver appears to be less affected by trichlorethylene than it is by ether.

Twenty-two years ago, Major Herdman blamed trichlorethylene for producing acute yellow atrophy of the liver in a case in which it was used as an anaesthetic agent for the cleaning of burns. However, another writer described the case of a comparable patient treated similarly, but without an anaesthetic, who suffered the same result.

In 1954, Nowill, Stephen and Margolin studied the prolonged administration of trichlorethylene on several different animals, without producing any observable functional or anatomical effects. The animals were exposed continuously to trichlorethylene vapour in concentrations of 0.05 to 0.1 volume per centum for periods averaging 18 hours daily for three months. Liver, renal and haemopoietic

function and growth rate did not show significant variations from normal.

Todd, in 1954, reported the case of a patient with acute paranoid psychosis, after 36 hours' coma due to swallowing trichlorethylene. The significant finding in this report is that there was no evidence of hepato-renal damage.

In 1956, Gilchrist and Goldsmith, of Edinburgh, investigated the metabolism of trichlorethylene, and were convinced that cases of liver damage and pulmonary complications were due to overdosage, to its use in a soda lime absorption unit or to stress factors not related to the anaesthetic. Their observations followed an investigation based on the administration of concentrations of trichlorethylene up to 1.6%, and for short intervals of 2.3%. They pointed out that these percentages were higher than those required or desirable. Trichlorethylene was used as an adjuvant to nitrous oxide and oxygen, and in the majority of cases, was administered in the chloroform bottle of a Boyle's machine. The quantity of trichlorethylene present in the blood immediately after administration ceased was measured, as well as the amount of trichloroacetic acid in the urine. Recovery experiments gave results of 95% to 97% for the trichlorethylene in the blood, and 94% to 96% for the trichloroacetic acid in the urine. Liver tests were carried out before the operation and several days after. The conclusions showed that environmental temperature influenced the evaporation of trichlorethylene, and the respiratory rate had the effect of increasing or decreasing the amount of vapour absorbed.

The placing of the patient in a special posture may reduce the tidal volume and thus reduce the amount of vapour entering the alveoli.

The duration of the administration is of less importance than the concentration of the vapour during the first 15 to 20 minutes of the anaesthetic. Although trichlorethylene in the quantities used for anaesthesia does not cause liver damage, this in no way invalidates the warning that it should be avoided for patients with known liver damage.

The elimination of trichlorethylene has been shown to be mainly by way of the lungs, but a small amount is eliminated by conversion to trichloroacetic acid which is excreted in the urine within the first three days after the operation. The higher the daily volume of urine excreted, the shorter appears to be the period of elimination.

According to Frant and Westendorp (1950), the diagnosis of intoxication can be made if values of more than 7.5 milligrammes of trichloroacetic acid per 100 cubic centimetres of urine can be detected. Gilchrist and Goldsmith have detected greater values than these in several of their cases, and have come to the conclusion that percentage control of the trichlorethylene vaporizer in a Boyle's apparatus is unreliable and may allow dangerously high concentrations to be administered. They plead for the abolition of the bottle by the makers and for its replacement by a more carefully calibrated vaporizer.

Urinary retention, infections and other complications appear to prolong the period of elimination. Delay in excretion also occurred in patients with large fat deposits, while a high metabolic rate increased the rate of elimination.

In January, 1957, Mapleson, of Cardiff, accepted the challenge of Gilchrist and Goldsmith that no detailed investigation of the control of vaporization in a Boyle's apparatus had been attempted. The concentrations of trichlorethylene were determined by means of an infra-red gas analyser, through which a continuous sampling flow was drawn. The experiment showed the following important results.

1. The concentration varied with time. Immediately after the tap was turned on, the concentration was relatively high and then fell with the passing of time. In 20 minutes the concentration fell by 10%, if the plunger was down to the surface, or by 5%, if the plunger was up.

2. The concentration varied with the degree of eccentricity of the plunger and the U-tube. When the plunger was moved from the central position until it touched the

outside of the U-tube, the concentration was affected by 20%.

3. The concentration varied with the distance of the plunger from the trichlorethylene surface. The concentration was highest and fell most rapidly with the plunger down. If gas was allowed to bubble through the trichlorethylene, a concentration of 3% to 5% was given for the first few minutes.

4. The concentration varied with tap setting. In January, 1946, British Oxygen Company, Limited, introduced a new design of tap. Although there was no change in external features, the internal modification considerably altered the way in which the concentration varied with the tap setting. In both old and new styles, the scale beside the tap comprises four horizontal lines separating the words "off" and "on". For the old-style tap, it was found that with the tap at the first and second marks from the "off" position, no vapour was obtained. With the tap at the third mark, the concentration after 20 minutes was about one third of that when the tap was fully on. With the new-style tap trichlorethylene vapour began to appear when the tap was between the first and second marks, and the concentration after 20 minutes then increased almost linearly with the tap setting until the fourth mark was reached.

5. The concentration varied with the gas flow. When the flow was increased to 10.5 litres per minute from seven litres per minute, the concentration was decreased by 15% to 20% with the plunger down to within zero millimetre from the surface, and to 10% to 15% with the plunger up. It was shown that so long as the gas is not bubbled through the trichlorethylene, the maximum concentration which can be inhaled through a reservoir bag and corrugated tube is 1.5%, and this rapidly falls to near 1%.

In January, 1956, Boston, of the Nuffield Department of Anaesthetics, showed that much smaller proportions of trichlorethylene vapour than those commonly employed could be used to potentiate nitrous oxide and oxygen mixtures. These low concentrations were shown to have considerable analgesic effect, but to produce few undesirable after-effects on the average patient. Boston used a modified "Trilene" vaporizing bottle. This vaporizer was calibrated by means of a spectrometer. The variable slot in the apparatus was modified to a finely pointed V-shape to obtain greater refinement for accurately delivering minute concentrations. With this modification, amounts as small as 0.05% to 0.1% of trichlorethylene vapour at a gas flow of up to 20 litres per minute could be delivered.

The positions of the control lever are calibrated with a maximum concentration of 2%, which may be required to bring a very resistant type of patient under control. This position should seldom be used and then only for a very short period. The tendency has been to use too high a proportion of trichlorethylene, but it has now been found that a vapour concentration of 0.1% to 0.5% is adequate for most cases when it is combined with nitrous oxide and oxygen. Higher percentages are required only for the induction of anaesthesia in general surgical cases.

Dr. Ralph Clark, the director of anaesthetics at St. Vincent's Hospital, Melbourne, has informed me that it is the rule at the Nuffield Department of Anaesthetics to administer trichlorethylene with the plunger of the Boyle's apparatus always in the up position. The use of this method has convinced us of its advantages in dosage control, and it supports Boston's contention that a vapour concentration much lower than that previously used is adequate for maintenance of anaesthesia when used with nitrous oxide and oxygen.

As induction is slow, further small additions of thiopentone may be needed to provide a smooth passage through the second stage and to stabilize the patient in the first plane of the third stage. Further small increments may be required if signs of lightening occur during the administration. A Gordh or Mitchell needle facilitates the administration of small doses of thiopentone, which need only to be approximately 50 milligrammes.

With care in the administration of this anaesthetic combination, rapid recovery of consciousness is the rule, and proficiency in this technique can be rapidly imparted to others.

Tachypnoea is a sign of overdosage, and the respiratory rate of the patient should not exceed 25 to 35 per minute. An increase in the respiratory rate occurs most frequently if the concentration of trichlorethylene is increased too rapidly, or when a greater saturation is attempted.

In 1955, Dr. W. H. Cole, of Melbourne, reviewed the factors involved in the successful administration of trichlorethylene and reached the following conclusions: (1) It should not be used for patients who are already dyspnoeic, as there appears to be an increased tendency to tachypnoea. (ii) The administration should be preceded by a minimal amount of pre-operative medication. To this may be added that careful assessment is necessary before the operation, and the dose of premedication should not be inadequate and should be given at least one hour before the anaesthetic. (iii) It should not be used when there is irregularity of the heart beat. (iv) Induction should be preceded by the use of a more quickly acting agent. (v) Pethidine should be used when necessary to control tachypnoea.

Conclusion.

As a result of the preparation of the foregoing brief summary, the conclusion has been reached that the wide use of coagulation by diathermy often limits anaesthetists to the use of non-inflammable agents.

For operations demanding moderate relaxation, trichlorethylene has proved to be ideally suited. It has found favour for the dual purpose, first, of teaching undergraduates the use of nitrous oxide and oxygen potentiated with a non-inflammable analgesic agent, which may be used without depriving the patient of voluntary respiration, and secondly, of introducing junior residents to the management of a Boyle's apparatus.

Wide reference has been made to the necessity for limiting the dosage of trichlorethylene to a very low concentration, and the plunger of the vaporizer must always be in the up position. Experience in administration will convince an anaesthetist of the very great potency of the vapour, and delay in the patient's recovering consciousness will reveal the slow and insidious overdosage which may occur.

The pharmacology of a drug depends on the accumulation of knowledge, in conjunction with carefully testing, coordination and systematization of its actions. The ultimate result in the safe administration of an anaesthetic agent depends on a preliminary apprenticeship, followed by a wide individual experience with limited supervision. Except for the tiro or in the briefest of administrations, an anaesthetist should not be used as the sole agent. The anaesthetist must draw from each agent at his disposal only those properties which are advantageous, and should curtail those which are prejudicial to the patient's well-being.

Trichlorethylene has only one contribution to make, and that is to provide a high degree of analgesia which requires a minimal level of vapour concentration. Overdosage with trichlorethylene appears to be common, and it is well to remember that there are no indications for increasing the concentration of the agent until tachypnoea or pulse irregularities are produced. Used correctly, trichlorethylene is a safe and convenient analgesic agent, which is ideally suited to potentiate nitrous oxide and oxygen anaesthesia in operations which require limited relaxation.

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AUTONOMIC DYSPRAXIA AS THE CAUSE OF RHEUMATOID ARTHRITIS AND RELATED DISEASES.

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AUTONOMIC DYSPRAXIA is a condition of instability of the autonomic nervous system of central origin, caused by an emotional overload, usually of fear, and resulting in malfunction of peripheral plain-muscle or glandular structures.

This term is introduced as none of the current terms covers all the factors contained in the foregoing definition. Neither autonomic imbalance nor vegetative imbalance conveys the concept of central origin, either descriptively or by definition. The terms sympathetic imbalance, vagotonia, vasomotor imbalance and vaso-neurosis exclude one or more of the essential requisites by their specific nomenclature. The term vegetative neurosis, as used by Alexander (1943), is closest to autonomic dyspraxia, but he restricted the use of the term by excluding hysteria and conversion phenomena. Also, as a result of its use and misuse, the term neurosis is best avoided.

The pathology of the anemia frequently found in cases of active rheumatoid arthritis has become clearer during the past few years. Sinclair and Duthie (1949) showed that iron given intravenously caused the restoration of normal blood figures in a considerable number of patients who had failed to respond to iron salts taken by mouth. It has been established that although the amount of iron in blood serum was low, absorption of iron from the gut was normal. Also, although there were none of the classical signs of haemolytic anemia, the survival time of transfused red cells was found to be decreased. However, Ebaugh *et alii* (1957) found that the survival time was normal if the patient's own red cells were tagged and used in the experiment. They considered that the anemia of rheumatoid arthritis was primarily, if not solely, due to marrow failure and not to increased haemolysis or iron deficiency. I agree with this, as the evidence for the occurrence of a small amount of hemolysis is well covered by the increased reticulo-endothelial activity of a general nature which occurs in this disease.

In certain respects the bone marrow is misleading. It is diffusely situated and has an ill-defined morphology; it lacks the self-evident identity of being a separate, peripheral organ such as the spleen, with a well-defined vascular supply, which in turn is controlled by its individual autonomic innervation. All organs with a structure sufficiently simple for our limited methods of study are known to have individual autonomic control. The rule should be presumed rather than made the exception. An autonomic dyspraxia which affects the marrow's blood supply could cause the marrow failure (partial) which is considered to be the cause of this anemia.

Malfunction of the autonomic nervous system is a constant clinical finding in the active stage of rheumatoid arthritis. The abnormal sweating, rises in temperature and colour changes in the hands especially, are well known. "Liver" palms and mottling of the thenar eminence are familiar evidence of autonomic disorder. In one of my cases a Raynaud type of discoloration of the fingers was the presenting symptom, and it has persisted for three years. In severe cases the anorexia manifests its autonomic origin when it progresses to eructations and leads later to vomiting. Nesterov *et alii* (1957), in a comprehensive study of 420 patients with the use of encephalograms, plethysmographs and capillary reactions to heat and cold etc., have confirmed this constant abnormality of the autonomic nervous system.

The widespread manifestations of these autonomic changes in an active case of rheumatoid arthritis indicate that it is of central origin. The involvement of all four limbs and the alimentary tract suggests a common basic factor rather than coincidental peripheral factors. When the causal factor is peripheral, as in the case of a pulmonary tumour, the autonomic changes (hypertrophic pulmonary arthropathy) are confined to the adjacent limb until the tumour becomes gross. Nesterov *et alii* also established the presence of disturbances in the central nervous system and higher centres.

An emotional overload is a well-known cause of malfunction of the autonomic nervous system. The inseparable interaction of emotion and the autonomic nervous system no longer requires proof (Alexander, 1943; Halliday, 1937 etc.). The occurrence of autonomic failure in times of emotional crisis (overload) is also well known. Fainting, vasovagal attacks, abnormal cardiac rhythms, pallor and hypertension are recognized malfunctions of autonomic function in response to an emotional overload. In each of the last 30 cases of rheumatoid arthritis I have investigated, a major and significant emotional crisis, often of a multiple nature, has occurred in the relevant period of time.

Rheumatoid arthritis is a multi-factor disease; in every case a number of factors are involved. The occurrence of the disease and its symptoms depends on the simultaneous occurrence of a number of these factors, namely, hereditary, climatic, traumatic, infective, emotional and other factors. Some of them may or may not be present. In my series of cases a major emotional crisis has always been present. I regard it as being fundamental; it determines the autonomic dyspraxia, without which the trauma, infection or other trigger factors will resolve normally along the usual lines of healing. In the presence of autonomic dyspraxia the same noxious factors produce the characteristic chain reaction type of neuro-vascular inflammation peculiar to rheumatoid arthritis and the "collagen diseases".

To understand autonomic dyspraxia better it is helpful to consider the following schemata of the cortical-pyramidal system.

Cortex.	Subcortical centres.
Consciousness.	Subconscious.
Reason.	Emotion (especially fear).
Pyramidal system.	Autonomic system.
Voluntary muscle.	Involuntary muscle.
Instant control.	Delayed; conditioned reflex.

In our medical training at the undergraduate level and after, the emphasis has been on the cortical-pyramidal system. Cortical activity is much better defined morphologically, its action is definite and well known to us; we identify it with consciousness and with our mental image of ourselves and our activities. The other activity is ill-defined and amorphous; its functions are rather nebulous and mostly distasteful; every term in the column has unpleasant associations. We regard ourselves as manifestations of cortical activity, whereas our being is the summation of both activities, and it is very doubtful if the cortical activity is dominant.

Cortex: cortico-thalamic tract: hypothalamus.

Autonomic tract.

Gland.	Plain-muscle fibre of:
	Respiratory tract.
	Alimentary tract.
	Genito-urinary tract.
	Artery or arteriole.

The same pathological process (malfunction) will occur in the same structure (plain muscle fibre) wherever it is situated. In view of the fact that every organ is dependent on its blood supply, every organ in the body can be affected by autonomic dyspraxia.

Every biological activity is subject to malfunction, which can vary through all degrees from the minimal to the maximal degree. In the case of the hollow viscera, the minimal malfunction produces minor manifestations of disorder, and the maximal degree results in atony or intense spasm. In the case of arteries, intense spasm causes necrotizing arteritis; the *vasa vasorum* are simultaneously involved, so when the spasm eventually passes the distal portion of the vessel is necrotic and haemorrhage occurs.

The basic disorder in rheumatoid arthritis appears to be arteritis. Since I postulated the fundamental disorder to be allergic arteritis with *polyarteritis nodosa* as the malignant type (Haynes, 1955, 1956), confirmatory findings have been reported. My clinical findings first found histological confirmation in the reports of Sokoloff, Wilens and Bunim (1951), who reported arteritis in muscle biopsies from cases of rheumatoid arthritis. At the Ninth International Congress in Rheumatic Diseases (1957), Schmid *et alii* reported arteritis in four out of five cases of rheumatoid arthritis complicated by peripheral neuritis. Histologically, the arteritis was necrotizing and indistinguishable from the arterial lesions of *polyarteritis nodosa*. They, too, were of the opinion that the evidence suggested that the use of steroids increased the incidence of severe necrotizing arteritis (Haynes, 1956). Gil and Moguel (1957) carried out an extensive study of 58 cases of disseminated *lupus erythematosus*. Twelve cases were studied at autopsy; skin or other tissue biopsies were carried out in almost every case, and widespread lesions in the vascular endothelium (arteritis) were found. These were considered to be responsible for all organ alterations in the course of the disease. Essentially similar lesions were reported by Fisher and Rodnan (1957) in the nephritis of diffuse scleroderma, though they did not describe the arterial lesion as "arteritis". They reported that the interlobular arteries first showed marked intimal oedema followed by a stage of cellular proliferation before the development of the final laminated sclerosis. As they also mentioned that many areas were indistinguishable from malignant hypertension, that the larger renal arteries were hardly involved and that a causal vasospasm was plausible, a classification of arteritis is very suggestive.

To summarize the evidence so far: the anaemia is primarily the result of marrow failure; marrow failure could result from impaired blood supply of the marrow; the impaired blood supply could result from impaired autonomic control. Evidence is presented of impaired autonomic function in rheumatoid arthritis. The widespread nature of the fault favours the theory of a central origin; an emotional overload is a common cause of impaired autonomic control. A major emotional crisis is known to have occurred at the relevant time in each of a series of 30 cases of rheumatoid arthritis investigated. A constant finding in rheumatoid arthritis and associated diseases is arteritis; in certain organs this lesion is very similar to that of malignant hypertension. The arteritis can be interpreted as the result of plain muscle spasm or as the result of malfunction of the autonomic nervous system. To some, the foregoing data satisfy the hypothesis that an autonomic dyspraxia is the basis of rheumatoid arthritis and related diseases.

Apart from the other "collagen" diseases, the controversial group of diseases which involves the upper limb and shoulder girdle is closely associated with rheumatoid arthritis. There is no more constant symptom in rheumatoid arthritis than shoulder girdle stiffness and pain. In severe cases of the shoulder-hand syndrome the hand is involved; the swelling and stiffness closely resemble the hand abnormality in the acute stage of rheumatoid arthritis. In two of my cases, after the disease had spread to the other upper limb, the knee joint became involved. What had commenced as a typical shoulder-hand syndrome developed into a typical case of rheumatoid arthritis. I presented two cases of shoulder-hand syndrome at the

clinical meeting of the Australian Rheumatism Association in November, 1956. Both cases had occurred at the height of an emotional climax. Both patients had been cured by purely psychotherapeutic measures without the aid of any antirheumatic drugs or physical medicine. In none of the many cases examined in the past 10 years has a similar cortico-thalamic factor been absent.

A number of these cases have dated back to an injury, and they have fulfilled the criteria for traumatic neurosis. Some cases have occurred in the lower limb; there have also been cases of traumatic neurosis. Other patients with disease in the upper limb have fulfilled the criteria for occupational neurosis. In each case there has been ample evidence that the basic disorder was autonomic dyspraxia.

As far as rheumatoid arthritis is concerned, the fact that the disorder depends on autonomic dyspraxia has an important bearing on the diagnosis and treatment. The diagnosis is not complete when similar conditions have been excluded and when it has been established that the disease is rheumatoid arthritis of a certain grade and severity. It is also necessary to establish the circumstances of the emotional crisis which is present. This is not always possible in cases of long standing. However, the opportunity for restoration of function has long passed in these cases and the loss is mainly of theoretical interest.

In the great majority of cases examined at the Rheumatism Clinic, St. Vincent's Hospital, Sydney, or in private practice, the onset of the disease is comparatively recent. The determination of the emotional factor is then most important from the point of view of treatment. At times the adverse emotional problem can be quickly remedied, with every prospect of a permanent remission. The patient in Case 11 in the series is an example. Her symptoms developed in the eight weeks after the tragic death of her brother-in-law after a motor-car smash. She received a telephone call to go straight to the hospital, as her brother-in-law had been admitted after a car accident. At the reception desk she asked if she could see Mr. A. While his ward was being checked she overheard a member of the staff say: "Oh, he died 10 minutes ago." The suddenness of events and the lack of preparation gave the patient the greatest shock she had ever experienced. In the following weeks she could not get the incident out of her mind. At the same time she would become nauseated and break out in a sweat. Explanation and emotional reeducation played a large part in her treatment, and it played a major role in her quick recovery and continued remission.

In all cases an attempt should be made either to remedy the circumstances of the emotional overload or, failing that, to help the patient make a better adjustment to the unalterable. In hospital practice the almoner and the occupational therapist can be of great assistance in this work.

It is not possible to get a complete and lasting remission when the emotional problem is unsolved. In those cases in which complete remission occurs without any diagnosis or conscious treatment of this problem, the emotional conflict has been resolved coincidentally (as by the death of a relative), by the patient himself unwittingly, or by the medical attendant in a similar role; the physician attributes the result to whatever drug he was giving instead of to his own unrecognized psychotherapeutic skill.

The basis of autonomic dyspraxia raises a broader therapeutic issue. Since the basis of the disease is a matter of conduct, the term being used in its widest meaning, it will not be possible to cure the condition by the administration of a drug alone. When a disease is caused by noxious conduct, either of the patient or of others, it is essential to remedy the conduct or the patient's reaction to it by psychological measures. Drugs can play a temporary, adjuvant role in this process. But if they are used as the principal or sole therapeutic measure, the outcome will often be failure. This appears to many to be the case with the cortisone group of drugs, including prednisone.

Summary.

1. Autonomic dyspraxia is defined as a condition of instability of the autonomic nervous system of central

origin caused by an emotional overload, usually of fear, and resulting in malfunction of peripheral plain-muscle or glandular structures.

2. The role of autonomic dyspraxia in causing the anaemia of rheumatoid arthritis through partial marrow failure is considered.

3. The clinical and instrumental signs of autonomic disorder in rheumatoid arthritis are discussed.

4. In a series of 30 cases of rheumatoid arthritis a major emotional crisis was found to have occurred in the relevant period before the onset of symptoms.

5. Attention is drawn to the role of autonomic dyspraxia in the arteritis frequently found in this disease.

6. There is ample proof that autonomic dyspraxia is the basis of rheumatoid arthritis and related diseases, and that an emotional overload is a constant factor.

Summaries of Cases.

The following are brief summaries of cases, showing the principal emotional factors in the development of rheumatoid arthritis.

Case 1.—A bookmaker, aged 43 years; domestic crisis as a result of the crescendo of drinking bouts with concurrent difficulties of attending meetings caused onset of symptoms.

Case 2.—A domestic, aged 48 years, single, devoted servant in a family for many years; as the children grew up and married, her future employment was threatened by the prospect of the aging parents selling the home to move into a flat; also she was in the throes of the menopause. While undergoing a vasovagal attack she fell down a flight of steps and fractured her patella. In the next few weeks the other joints became involved.

Case 3.—A school teacher's wife, aged 27 years; financial problems and housing problem, culminating in living with her in-laws with young children; concomitant Oedipus tension with invalid mother was present.

Case 4.—A housewife, aged 62 years; her second marriage to an elderly seafarer whose early retirement and exacting ideas of wifely duties caused constant tension. One month before her symptoms developed he developed an ulcer; thus she was placed at a further disadvantage in the battle of wills.

Case 5.—A housewife, aged 39 years, fell from a tram with inconsequential physical injury, but she was terrified. Onset of disease was three weeks later.

Case 6.—A housewife, aged 29 years, a recent arrival from Central Europe, where she had enjoyed every luxury. Apart from her husband, she was separated from her family and friends. She was badly adjusted and worried about the housing problem as well as panicky at her incompetence with the baby.

Case 7.—A domestic, aged 62 years, living on a country property for many years with a childless couple who were retiring through age. The property was for sale.

Case 8.—A widow, aged 58 years, who had struggled for 20 years to rear her only son. For several years she had had many vicissitudes in a residential venture. Polyarthritis developed a few weeks before her son announced his engagement.

Case 9.—A spinster, aged 71 years, was involved in a tenancy dispute which resulted in her losing her room two months before the onset of symptoms.

Case 10.—A childless wife, aged 63 years, who had built her life around a nephew who was about to be ordained. Three days before the ceremony, "the most important event in my life", she burnt her hand. After she had travelled 100 miles in bitterly cold weather, the hand developed an agonizing pain on the eve of the great day. She walked the floor in a strange hotel, unable to secure the aid of a doctor. She missed the ceremony. The pain eventually spread to the small joints of both hands, wrists, elbows and knees.

Case 11.—A childless wife, aged 46 years; onset of disease took place two months after the tragic death of her brother-in-law. She was called to the hospital with the message that he had been injured in a car smash. On asking directions at the inquiry desk, she was profoundly shocked to overhear the statement, "Oh, he died 10 minutes ago".

Case 12.—A spinster, aged 54 years, a refined, retiring type of woman who supported her invalid brother and sister by working in a bar. The onset of the disease occurred six

weeks after her sister suffered a particularly severe attack of bronchitis and asthma.

Case 13.—A housewife, aged 63 years, who had an especially close attachment to her father because of her stepmother's reaction; the onset of symptoms took place a few weeks after her father's death from a protracted illness, of which she bore the main burden.

Case 14.—A husband, aged 38 years, caught in a very tense Oedipus situation. The domineering father was trying to force him into the successful family business, but he had burnt his boats and joined a rival concern.

Case 15.—An athlete, aged 25 years, undergoing intensive training for rowing selection had the simultaneous pressure of an impending engagement.

Case 16.—A mother, aged 62 years; onset of symptoms took place a few weeks after her favourite son (the baby of the family even though he was over 20 years of age) had suffered a profuse attack of haematuria. The suspense of the investigation lasted several weeks.

Case 17.—A migrant, aged 33 years, single, experienced acute onset of the disease on the day after a dance at which he had had a difference with his fiancée; simultaneous with this was the anniversary of his last news from his family, who were still behind the Iron Curtain.

Case 18.—A mother, aged 53 years; symptoms began during prolonged investigation for diarrhoea and melena after a course of deep X-ray therapy subsequent to an hysterectomy.

Case 19.—A clerk, aged 34 years, married; during the tension of holding down two jobs for extra money to pay off his house he suffered an attack of haematuria; polyarthritis developed from a "tennis elbow" in the next two months.

Case 20.—A typist, aged 24 years, single, who had a guilt complex dating back to puberty; insidious onset of the disease during the month after her mother's hysterectomy.

Case 21.—A motor-bus driver, aged 55 years; the onset took place one month after his second traffic accident, both of which greatly upset him emotionally.

Case 22.—A husband, aged 66 years; childless, his wife had been admitted for shock treatment. At first the idea was so repugnant to him that he refused permission; the first series of 12 shocks was unsuccessful. He was "running backwards and forwards every day" when the polyarthritis developed in his feet.

Case 23.—A divorcee, aged 64 years. Her ex-husband, a drunken seaman, was found dead from pneumonia in a residential and she was brought into the inquest, which greatly upset her; onset of symptoms took place within the month.

Case 24.—A typist, aged 35 years, single, was supporting her ailing mother who collapsed at the races; the daughter was in a cinema at the time and suffered a terrific shock when the message was flashed on the screen.

Case 25.—A wife, aged 32 years; onset of disease occurred three months after her confinement; the difficulty of attending to her baby was complicated by housing problems.

Case 26.—A mother, aged 45 years, had recently emigrated from England with her husband and small child. Onset of symptoms occurred six weeks after their arrival in Sydney, whilst they were still accommodated in a migrant camp without any prospect of better accommodation.

Case 27.—A mother, aged 27 years; onset of symptoms was after the birth of her first baby during a slow crescendo of marital discord which eventually ended in their divorce.

Case 28.—A father, aged 57 years; onset occurred within a month of his wife's leaving him and taking his daughter.

Case 29.—A wife, aged 58 years; onset occurred after separation from her husband which finally led to divorce. A complete remission was obtained and she felt so well that she remarried. Within a month she was back at the clinic with an acute exacerbation, maintaining that the second marriage was a great success. However, within three months they had separated.

Case 30.—A schoolboy, aged 12 years, an over-conscious student, but his efforts failed to come up to the standard he thought his parents expected; onset of symptoms took place a week after the departure of both parents on a round-the-world flight.

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ACTINOMYCOSIS: A SURVEY AND CASE REPORT.

By MARGERY SCOTT-YOUNG,
Sydney.

THE appearance from time to time of a case report or of an article on actinomycosis serves as a valuable reminder of the existence of this somewhat rare condition, which can, under certain circumstances, prove troublesome. Because the disease is not of everyday occurrence, it is apt to be forgotten and diagnosis made late. Its geographical distribution is wide, and it has been diagnosed "wherever there is a microscope and a laboratory" (Cope, 1938). Moreover, as far as the individual case is concerned, it "may occur in the most unlikely situations and under various disguises, so that the only safe rule is always to consider the possibility of actinomycosis when dealing with any subacute or chronic lesion, whether thought to be inflammatory or neoplastic" (Cope, 1952).

The Causative Organism.

Actinomycosis may be defined as a chronic but progressive granulomatous condition characterized by inflammatory induration and abscess and sinus formation, and due to invasion of the tissues by an actinomycete. The actinomycetes, as a group, have certain characteristics in common with bacteria such as the tubercle bacillus, and other characteristics in common with those fungi which reproduce asexually (Fungi Imperfecti). The organisms are characterized, in general, by very delicate branching hyphae not exceeding 1.5 μ in diameter. Considerable confusion has arisen over the years with regard to the classification and nomenclature of the actinomycetes, but recent research work has done much to clarify this, and it is now known that they fall broadly into the two following groups.

A Grass-Borne, Aerobic, Saprophytic Group.

Bostroem (1891) regarded these as the cause of actinomycosis in cattle. However, investigations show that the pathogenic organisms isolated from actinomycotic lesions in man and animals are essentially anaerobic (or, more correctly, microaerophilic). The aerobic forms are non-pathogenic, and the terms *Actinomyces bovis* Harz and *Actinomyces bovis* Bostroem applied to such free-growing aerobes, could, it has been suggested, be replaced by the term *Actinomyces graminis* (Topley and Wilson).

An Anaerobic (Microaerophilic) Pathogenic Group.

At one time, a single species was regarded as the cause of actinomycosis in man and cattle. That there are, almost certainly, two distinct organisms has been demonstrated by the recent researches of Erikson (1940) and Thompson (1950).

Erikson has demonstrated morphological, physiological and serological differences between human and bovine strains and he suggests that the general term, now commonly used, viz. *Actinomyces bovis* Wolff-Israel, should be replaced by the terms *Actinomyces Israeli-Kruse* as applied to human strains, and *Actinomyces bovis* for cattle strains.

The Diagnosis of Actinomycosis.

Human actinomycosis (*A. Israeli-Kruse*) is diagnosed by the demonstration of the characteristic "sulphur granules" in pus or tissue sections, each granule being composed of a mass of delicate, branching hyphae which are acid-fast and Gram-positive. The peripheral hyphae of such a granule are club-shaped and show an affinity to the Gram's counter-stain, a condition not found on culture *in vitro* and therefore to be regarded as the result of host-parasite reaction.

Aetiological Considerations.

A. Israeli-Kruse is frequently found in the human mouth round carious teeth and in tonsillar crypts. The frequency with which the organism can be isolated in these sites and the relative rarity of the disease argue a high natural immunity or other factors at present not understood.

Transmission from man to man is extremely rare, although Robinson has reported such transmission from a bite on the forearm. It is probable that, in the majority of cases, infection is endogenous. Injury to the buccal mucous membrane (as in dental extraction) permits entry of the organisms to the tissues of the face and the neck. Aspiration carries the actinomycetes from the mouth to the lungs; swallowing takes it to the alimentary tract, where mucosal abrasion or other trauma (e.g., operative) facilitates its entry into the tissues of the mediastinum or the abdominal cavity.

Clinical Features and Classification.

Clinically, cases of actinomycosis may be classified according to the site of the disease into the following groups: (i) cervico-facial (55% of all cases); (ii) thoracic (20% of all cases); (iii) abdominal (20% of all cases); (iv) other sites (5% of all cases).

Cervico-Facial Actinomycosis.

Cervico-facial actinomycosis is characterized by the appearance of a painless swelling in relation to the submucous tissues of the alveolus, the floor of the mouth, the salivary glands or the tongue, or even within the paralaryngeal tissues. At first the swelling is hard, but later softening occurs and a sinus forms, examination of the discharge from which should reveal the diagnostically important "sulphur granules". The tissues about the sinus track show marked induration, which extends gradually, while here and there, within its extent, further points of softening and sinus formation develop. Extension of the condition to the orbit, the cervical vertebrae and the cranial cavity can occur.

Thoracic Actinomycosis.

Thoracic actinomycosis is seldom diagnosed early. It may arise in any of the following ways: (i) As a primary condition within the lung from the aspiration of infected material (e.g., a carious tooth); (ii) as the result of the spread of the infection up through the diaphragm from abdominal actinomycosis; (iii) as a primarily mediastinal condition resulting from infection through an oesophageal abrasion.

Actinomycosis of the lung manifests itself initially in pulmonary consolidation with cough and sputum. There is subsequent spread to the visceral pleura, causing pleural effusion, infiltration of the thoracic wall, pointing empyema and sinus formation. Cerebral abscess and general dissemination of the disease are common sequelæ.

Mediastinal actinomycosis involves the vertebrae and the heads of the ribs, and it quite early attacks the thoracic wall in the paravertebral zone with sinus formation.

Abdominal Actinomycosis.

Abdominal actinomycosis may follow the perforation of a peptic ulcer, but more commonly it develops in the right iliac fossa after acute perforating appendicitis or even after an apparently straightforward appendicectomy. (Pitman, Dockerty and Waugh, quoted by Damgaard-Mørch, state that in 72% of 122 cases, abdominal actinomycosis followed acute perforating appendicitis.)

The development of indurated masses which are painless to palpation, and which progress to parietal involvement and the formation of sinuses, characterizes the condition.

Spread of the condition from the primary site is usually by direct extension, but, in some cases, involvement of the portal venous system has resulted in early metastatic liver involvement.

The diagnosis of visceral actinomycosis is difficult in the early stages. The patient has irregular fever, moderate leucocytosis and raised erythrocyte sedimentation rate. The finding of indurated masses and the presence of sinuses should arouse suspicion. The diagnosis is confirmed by the demonstration of "sulphur granules" in the discharge from sinuses.

In the absence of appropriate and adequate therapy, visceral actinomycosis will progress, terminating eventually in pyæmic dissemination, in involvement of vital structures or in amyloid disease.

Treatment.

Advances in chemotherapy and antibiotics have entirely altered prognosis.

Sulphanilamide, sulphathiazole and sulphadiazine have been shown to inhibit the actinomycetes *in vitro*, and clinically, cures have been effected by sulphamerazine (one gramme administered every six to eight hours for several weeks). The organisms have also been found sensitive to chloramphenicol, streptomycin, "Terramycin" and "Aureomycin" as well as to penicillin.

Penicillin is of the utmost importance in therapy. Cope recommends a daily dose of 2,000,000 units continued without interruption until symptoms and signs subside and for some weeks thereafter, to guard against relapse. Fisher and Harvey point out that, although actinomycosis is highly sensitive to penicillin and other antibiotics, there is often difficulty in building up a bactericidal concentration of the drug in the areas of active infection. This difficulty is related to the extent of the lesion, its marked induration and the relative avascularity in the vicinity of the growing organism. Harvey and Fisher recommend doses of from 3,000,000 to 6,000,000 units of penicillin per day for six months or longer.

The Role of Surgery in the Treatment of Actinomycosis.

Surgery still holds an important though diminishing place in the treatment of this disease. It follows the lines of first, adequate drainage of abscesses, or secondly, excision of lesions, when this is practicable.

Iodides have been used for many years and are still a useful ancillary to chemotherapy, antibiotics and surgery. They may be given as a saturated solution of potassium iodide, commencing with a dose of three minims three times a day and increasing gradually. Cope recommends *Tinctura Iodi* five minims three times a day, in milk.

X-ray therapy has proved effective in the past and is still useful when, for some reason, antibiotic therapy is contraindicated.

Report of a Case.

Miss A., a schoolteacher, aged 36 years, was examined on July 5, 1956. She reported that, four weeks previously, she had had an abscessed left lower molar tooth extracted. Extraction had been followed by the average amount of local swelling, which subsided within 48 hours. On about July 1, a painless swelling was observed below the jaw on the left side. When she was examined a swelling could easily be seen in the left submandibular region, which, on palpation, was

woody-hard, roughly spheroidal and about 4.5 centimetres in diameter. Bimanual examination through the buccal floor showed the mass to lie in a position superficial to the mylohyoid, and to be movable to a slight extent upon the mandible, to which it had seemed adherent when it was palpated from the neck alone.

Actinomycosis was considered to be the most likely cause of such a swelling, and the following treatment was begun. (i) *Mistura Potassii Iodi*, 0.5 ounce three times a day; (ii) sulphadiazine tablets, two grammes as an initial dose, and one gramme every four hours as a maintenance dose; (iii) penicillin 4,000,000 units per day divided into morning and evening doses.

On July 13 (the eighth day of treatment) the patient suffered an alarming reaction during a penicillin injection. On July 14, the penicillin dose was halved and given without event. On July 15, a further reaction occurred about half an hour after the penicillin injection. It was decided to discontinue the penicillin.

By this time the swelling in the neck had greatly diminished to about one centimetre in diameter. By August 2, there was only a small, firm, residual nodule. The iodide mixture was discontinued at this point.

On August 6, the patient reported that the swelling seemed larger. This was indeed the case, and there was now fifty to the skin with central softening.

On August 9, with the patient under general anaesthesia, the whole nodule, including overlying skin, was excised down to the mylohyoid. The tissue was sent for histological examination.

On August 9, the sutures were removed, and it was noted that induration was present in the vicinity of the wound.

The histological report submitted on August 17 stated that microscopic examination of sections confirmed the diagnosis of actinomycosis. Colonies of the organism were present in actively inflamed granulation tissue in the subcutaneous area.

It was decided, in view of the induration around the site of excision, to submit the patient to X-ray therapy. She was given, therefore, a course of therapy to the submandibular area of induration from August 22 to September 3, the factors being 234 kilovolts, 12.5 milliamperes, a half-value layer of 2.0 millimetres of copper and a field size of eight by six centimetres. She received six doses each of 250r, a total dose of 1500r.

When examined in April, 1957, the patient was perfectly well.

Acknowledgements.

I wish to thank Dr. N. M. DeCock, who first brought the patient to my notice, Dr. C. B. Cox and Dr. G. V. Rudd for the histological examination of tissue, and Dr. E. J. Hardcastle, who carried out the radiotherapy.

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WOLFF, F. M., and ISRAEL, J. (1891), "Ueber Reincultur des Actinomyces und seine Uebertragbarkeit auf Thiere", *Arch. path. Anat.*, 126: 11. (D. Erikson, *loco citato*, and Z. Cope, *loco citato*.)

Reviews.

The Strategy of the Genes: A Discussion of Some Aspects of Theoretical Biology. By C. H. Waddington, Sc.D., F.R.S.; 1957. London: George Allen and Unwin, Limited. 8½" x 5½", pp. 272, with many illustrations. Price: 28s. (English).

C. H. WADDINGTON, Professor of Animal Genetics at the University of Edinburgh, stands in the very forefront of experimenters and thinkers in a most difficult field of biology. He has now published five essays dealing with biological organization and the theory of evolution, which give a penetrating analysis of recent work and speculation. It is curious that when a man of science writes on the philosophical aspects of his specialty, he often adopts a mannerism reminiscent of the metaphysician—namely, the frequent use of terms which are peculiarly his own invention. This makes reading and assimilation difficult. Take, for example, a sentence in the epilogue: "The fundamental characteristics of the organism—its Form, to use the term which was employed in the Introduction—are time-extended properties, which can be envisaged as a set of alternative pathways of development, each to some degree, greater or lesser, a creode towards which the epigenetic processes exhibit homeorhesis." Now if the preceding portions of the book have been studied, this sentence, apparently cryptic to the uninitiated, assumes major importance. Isolated chapters cannot be picked out for separate study; the book must be read as a whole, and terms like creode, regionalization and canalization will, after definition, take their place rightfully in the complex argument. The difficulties which beset all evolutionary theories are candidly set out, but many old doubts and obstacles are surmounted. Thus, one of the strongest arguments brought forward by opponents of evolution was the challenge to account for some faculty which in its earlier stages could not apparently confer any benefit on the possessor. "It is, of course, always possible that minor differences . . . have some unsuspected importance in the animal's life and that differences in these respects have been brought about strictly by natural selection." Waddington might have mentioned the powerful electric shocks of the gymnotus, which would have been useless as shocks in earlier stages of development. We now know that the primary function of an electric organ is to detect electric conductivity (conversely resistance) in nearby objects.

The interplay between environment and Mendelian inheritance is discussed in a masterly manner. Herbert Spencer gave us the term "survival of the fittest" as superior to Darwin's "natural selection"; Waddington improves on this by the expression "survival of the adaptable". It is interesting to note the frequent quotations from Russian sources—though Waddington delicately lets the reader know what he thinks of Lysenko.

A sixth essay on "Some Physico-Chemical Aspects of Biological Organisation", by H. Käser, is a plea for the application of physico-chemical methods and mathematical handling in biological research and exposition. "If we believe that the biological process is the result of an underlying physico-chemical one, then a re-statement of the problem in these terms appears the most appropriate." If we do not believe, then Käser expresses the hope that his presentation is not without value.

The Closed Treatment of Common Fractures. By John Charnley, B.Sc., M.B., F.R.C.S.; Second Edition; 1957. Edinburgh and London: E. and S. Livingstone, Limited. 9½" x 7", pp. 272, with 199 illustrations. Price: 50s. (English).

This second edition of Charnley's "Closed Treatment of Common Fractures" is welcome after a seemingly period of seven years from the original. Frequent editions can resemble year books; but here has been produced a work which still maintains the earlier beliefs of the author and, in addition, introduces new material, matured after adequate

trial. The length has been increased by 70 pages, and the illustrations have been augmented by 50%.

In an age of nuts, bolts, screws and nails, this book fully justifies its publication in the first chapter alone; it is entitled "Conservative versus Operative Methods", and the author stresses the biological basis of fracture healing as opposed to the purely mechanical. It should be read by all those, young and old, who engage in fracture treatment.

Among many items of interest is yet another modification of the Hamilton-Russell method of leg traction. Credit is given to the Phemister bone graft; and it is worth noting that the difficulty of the Smith's fracture is stressed, with the need for full supination of the forearm and the above-elbow plaster. Evidently the author, like many others, has had trouble in treating compound comminuted fractures of the tibia, and again he advocates the McKee method, which deserves wider use. In short, this is a most worthwhile book.

Principles of Surgical Physiology. By Harry A. Davis, M.D., C.M., F.A.C.S.; 1957. New York: Paul B. Hoeber, Incorporated. 10" x 6½", pp. 864, with 49 illustrations. Price: \$20.00.

THIS book has much to offer the surgeon, the surgical trainee, or the man who practises surgery as part of a general interest in medicine, and who is likely from time to time to have to deal with problems alone which he would prefer to share with others.

In these days many competent surgeons are inclined to develop a feeling almost of despair when they are exposed to the outpourings of their younger colleagues, who have a mass of physiological data at their finger-tips, and present it in a way which frightens the older, but none the less wise and capable surgeon. He may sometimes want desperately to refer to an authoritative text-book designed especially for the surgeon, and intended to help him in the many dilemmas which arise in the overall care of his patient. This text-book of Harry Davis fills this role admirably. The whole gamut of normal function is outlined, and throughout there is a strong surgical slant on the physiological information which is proffered. In addition, there is a bibliography complete enough to satisfy the most discriminating.

The work is much more extensive than the title implies. There is a wealth of detail, which provides an answer to most of the problems on which information might be sought, and also to those principles about which one had not thought very deeply. On reading the text we can discover a considerable interest in the information given on a myriad of topics of much surgical importance.

To the surgical trainee, studying for a post-graduate diploma, this book would be most valuable and could replace in many ways some of the text-books of standard physiology with which, in preparing for these examinations, he has to grapple.

To the more casual surgeon the reference tables should prove of tremendous value, and the diagrams, which are clearly and simply delineated, would answer many of the problems he has to face. The trained physiologist might cavil at a number of points; but the express purpose of this book is for it to be a surgeon's "guide", and in this regard it has achieved its end admirably.

Clinical Use of Radioisotopes: A Manual of Technique. Edited by Theodore Fields, M.S., F.A.C.R. (Assoc.), and Lindon Seed, M.D.; 1957. Chicago: The Year Book Publishers, Inc. 7½" x 5", pp. 456, with 71 illustrations.

THIS useful small volume is designed to inform physicians of the place of available radioisotopes in investigation and treatment of appropriate diseases. A section of the book is devoted to the planning and operation of a small isotope laboratory in a medium-sized general hospital, and a further section sets out measures to be taken in regard to all phases of radiation safety.

The first part details the tests applicable to determination of thyroid function and their clinical interpretation, and suggests only those proceedings which are simple and have been found reliable. Unfortunately, some of the figures given for normal thyroid function are not correct for Victorian conditions. Chapters on blood and circulation studies embrace the use of radio-iodinated human serum albumin and radioactive chromium and phosphorus, and include methods of determination of blood-volume red-cell survival. Radiocobalt-labelled vitamin B₁₂ studies are well discussed. Methods of localization of tumours by isotopes are considered, but the results are not very useful. In the

chapter on cardio-vascular studies, determination of cardiac output as well as peripheral vascular studies is described. Isotope treatment details are given in full for such conditions as toxic goitre and blood diseases. The use of isotopes for therapy of carcinoma of the thyroid and prostate and of malignant effusions is well covered.

The foregoing chapters constitute more than half the volume, and the accounts given are concise and so naturally somewhat dogmatic; but the information made available is quite up to date and well presented, and covers more than reasonably all the investigational and therapeutic uses of isotopes in present routine medical use. These chapters will be of great value to any consultant physician or radio-therapist.

The latter portions of the book are of more interest to the hospital physician, and full details are given for the setting up of an isotope service for a general hospital. The final chapters detail protective measures applicable to medical and nursing staffs, and give in a most useful form copies of instructions for issue to patients under investigation or treatment.

The editors have attained their object of presenting the present-day techniques and uses of isotopes in medicine in a compact and concise form, and have produced a most useful small volume, which can be recommended with confidence.

Breast Feeding: A Guide to the Natural Feeding of Infants.
By F. Charlotte Naish, M.A., M.D.; Second Edition; 1956. London: Lloyd-Luke (Medical Books), Limited. 5" x 7", pp. 175, with illustrations. Price: 12s. 6d.

CHARLOTTE NAISH was awarded the Sir Charles Hastings Clinical Essay Prize in 1947 for her work on lactation. This essay was published as the first edition of "Breast Feeding". It includes the careful clinical observations of a highly intelligent woman as she worked in a general practice consisting largely of the management of women and children, and while she also learned to manage her own five children. It is very interesting to see how she fought the battle against rigid routine feeding and worked for better understanding of physiological and psychological principles. That battle having apparently been won in Britain (but not in Australia), she now finds she has to try to call a halt to the extremists who rushed headlong into "demand feeding", ignoring the very principles she had been trying to teach.

This book could well be used in conjunction with "The Breasts and Breast Feeding" by Harold Waller, and will be found useful by all doctors and nurses concerned with the management of mothers and babies. It covers anatomy and physiology of lactation, and there is an excellent section on the mind of the mother; the supervision of the lactation for the whole breast feeding period is described in detail. It is not to be regarded as a comprehensive scientific book, as it draws little from research work in countries other than Britain; but it is a good, practical handbook, and its mixture of scientific accuracy, common sense and knowledge of human nature will help every general practitioner.

Books Received.

[The mention of a book in this column does not imply that no review will appear in a subsequent issue.]

"Clinical Orthopaedics", Number 10; editor-in-chief, Anthony F. De Palma, with the assistance of the associate editors, the Board of Advisory Editors and the Board of Corresponding Editors; 1957. Philadelphia and Montreal: J. B. Lippincott Company. Sydney: Angus and Robertson Ltd. 10" x 6", pp. 384, with many illustrations. Price: 82s. 6d.

One of a series of volumes of original articles produced under the auspices of the Association of Bone and Joint Surgeons.

"Microscopic Anatomy of the Temporal Bone: A Photographic Survey of Serial Sections of the Temporal Bone Cut in the Three Routine Planes of Sectioning Human Specimens", by Dorothy Wolff, A.B., M.A., Ph.D., Richard J. Bellucci, B.S., M.S., M.D., and Andrew A. Eggeston, B.S., M.D.; 1957. Baltimore: The Williams and Wilkins Company. Sydney: Angus and Robertson, Limited. 9" x 7", pp. 428, with 198 illustrations. Price: £6 17s. 6d.

Compiled primarily for specialists in otology.

"Understanding Your Patient", edited by Samuel Liebman, M.D.; 1957. Philadelphia, Montreal: J. B. Lippincott Company. Sydney: Angus and Robertson Ltd. 9" x 5", pp. 180, with two illustrations. Price: 5s.

Nine contributions to a lecture series entitled "The Medical Practitioner's Contribution toward Healthy Emotional Development—The Physician as a Counsellor".

"Report of the Ministry of Health for the Year Ended 31st December, 1956: Part II. On the State of the Public Health"; 1957. London: Her Majesty's Stationery Office. 9" x 5", pp. 268. Price: 9s. (English).

The annual report of the Chief Medical Officer for the year 1956.

"Orthopaedics for the General Practitioner", by William E. Kenney, M.D., and Carroll B. Larson, M.D., F.A.C.S.; 1957. St. Louis: The C. V. Mosby Company. Melbourne: W. Ramsay (Surgical), Limited. 9" x 6", pp. 416, with 180 illustrations. Price: £6 6s. 6d.

The authors state that the book should aid not only general practitioners, but also paediatricians.

"The Medical Interview: A Study of Clinically Significant Interpersonal Reactions", by Ainslie Meares, M.B., B.S., B.Agr.Sc., D.P.M.; 1957. Springfield, Illinois, U.S.A. 8" x 5", pp. 128. Price: 25s. (British).

Deals with "interviews which do not concern organic illness, neither are they psychiatric interviews in any real sense".

"Allergy in Pediatric Practice", by William B. Sherman, M.D., and Walter R. Kessler, M.D., Ph.D.; 1957. St. Louis: The C. V. Mosby Company. Melbourne: W. Ramsay (Surgical), Limited. 9" x 6", pp. 296, with many illustrations. Price: £5 1s. 9d.

Intended for general practitioners and paediatricians without special training in allergy.

"Symposium on Diseases and Surgery of the Lens"; Editor, George M. Halk, M.D., F.A.C.S., Associate Editor, Elisabeth M. McFetridge, M.A., Art Editor, Don Alvarado; 1957. St. Louis: The C. V. Mosby Company. Melbourne: W. Ramsay (Surgical), Limited. 9" x 6", pp. 260, with 232 illustrations. Price: £5 15s. 6d.

The proceedings of the fifth annual session of the New Orleans Academy of Ophthalmology.

"Transactions of the International Society of Plastic Surgeons", First Congress, edited by Tord Skoog, M.D., and Robert H. Ivy, M.D.; 1957. Baltimore: The Williams and Wilkins Company. Sydney: Angus and Robertson, Limited. 10" x 6", pp. 584, with 467 illustrations. Price: £11.

The transactions of a congress held in Stockholm and Uppsala in 1955.

"Practical Use of the Office Laboratory and X-Ray: Including the Electrocardiograph", by Paul Williamson, M.D.; 1957. St. Louis: The C. V. Mosby Company. Melbourne: W. Ramsay (Surgical), Limited. 10" x 6", pp. 323, with many illustrations. Price: £5 18s. 3d.

This book is not a compendium of advanced techniques. No procedure is listed or discussed that cannot be done by a home-trained technician in any office with a minimum of basic equipment."

"A Contribution to the Study of Portal Hypertension", by Alan Henderson Hunt, M.A., D.M., M.Ch., F.R.C.S.; 1958. Edinburgh and London: E. and S. Livingstone, Limited. 9" x 6", pp. 244, with 120 illustrations. Price: 40s. (English).

The Jacksonian Prize Essay, Royal College of Surgeons, 1956.

"The Surgical Clinics of North America", Mayo Clinic Number, August, 1957. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 8" x 5", pp. 393, with many illustrations. Price (six issues per year): Paper binding, £6 15s.; cloth binding, £8 2s. 6d.

A symposium from the Mayo Clinic on abdominal surgery, containing 21 papers.

"The Year Book of Drug Therapy", edited by Harry Beckman, M.D.; 1957-1958 Series. Chicago: The Year Book Publishers. 7" x 5", pp. 520, with illustrations. Price: \$7.50.

One of the Practical Medicine Series of Year Books.

The Medical Journal of Australia

SATURDAY, APRIL 12, 1958.

CARDIO-VASCULAR REHABILITATION.

In America, unquestionably, rehabilitation and the total care of the patient have extended further than in any other area of the world. This is probably the resultant of several forces. In an intensely competitive profession, there is always an urge to practise a new field of medicine and to develop it as rapidly as possible. The sense of social service as an individual and community responsibility is high in the United States. Finally, the Federal, State and local authorities are more imaginative and generous in the provision of finance than in any other country.

These considerations become apparent from perusal of a verbatim report of a conference on cardio-vascular rehabilitation¹ held last year at the New York University-Bellevue Medical Center, sponsored by their well-known Institute of Physical Medicine and Rehabilitation, and supported by a grant from the National Heart Institute, United States Public Health Service. This conference was under the co-chairmanship of Dr. Paul White and Dr. Howard Rusk. The 35 participants represented practising physicians and paediatricians, medical educators, factory physicians, public health officers, specialists in rehabilitation and representatives of bodies such as the Veterans' Hospitals and the National Health Institutes.

The first topic discussed was the emotional aspects of the sufferer from cardio-vascular diseases and their effect upon circulatory dynamics. An interesting outcome of this section of the conference was the description of experiences in which it would seem that certain emotional reactions precipitated events such as congestive heart failure and coronary or cerebral occlusion. It was agreed that no real evidence exists at present to explain such occurrences, although *angina pectoris* and some arrhythmias may be specifically related to certain emotions. Abnormalities in the circulation during smoking may be related to the emotional aspects of this habit as well as to its pharmacology. Similarly, any contact between the patient under test and scientific apparatus may modify the response through emotional influences. Further discussion in this section included reference to the description of the patient's orientation to his own body image, his personality

and his external relationships, following realization of the presence of heart disease. Analysis and rehabilitation must take all these areas into account, as readaptation is regained in each. The patient may quickly regress to a child-like dependent situation, which can be very damaging and persistent. Rehabilitation or neurosis really begins at the moment of the first contact of the patient with his physician, and a great responsibility exists for the physician at this instant. The anxiety of the rheumatic child who is aware that relatives have died of his or her disease, or who has seen other children in a heart home die, is an entity which should be realized. Similarly, the over-protective parent can engender anxiety and fear, and so retard recovery. One participant claimed that sufferers from aortic valve lesions resembled patients with coronary artery disease in having a more aggressive personality than those with mitral disease.

The next topic discussed by the conference was the question of working ability and suitability for reemployment. All agreed that this was an emotional as well as a physical problem. The full details of the job, the patient's interest or otherwise in it, environmental factors, including the personality of the foreman, the energy expended in travelling to and from work, even the temperature of the workshop or office must be taken into consideration. It is not enough to know the average energy requirement, but also what the peak loads are. Experience has shown that there is actually more variation between individuals doing the same jobs than between the same jobs done by the one individual. Many recreational activities exceed in energy that required in industry. Tests have shown that cardiac patients use about the same amount of oxygen at work as normals, with the exception of peak load periods. Questioning the worker about his symptoms at work may be misleading, as he may be afraid of dismissal. It appears that Work Classification Centres are rapidly increasing in number in the U.S.A. Here the patient is fully evaluated, and his work capacity studied objectively by means of various exercise tests. He is returned to his former work if possible; if not, he is recommended another type of employment, and steps are taken to place him in this. Any physical test must be simple, and not require special equipment or gadgets. There is no real substitute for sound clinical judgement based on experience. There are tests which do indicate what a person can do in terms of energy load, but not what he could do in a specific job.

The record of cardiac patients who have returned to productive employment is very encouraging, but the attitude of management must also be considered. In a world of competition, all hands must be fit and able to tolerate a "peak load" when called upon. Further, the claim-conscious employee can prove an expensive investment with modern definitions of "aggravation". It is justifiable for management to investigate attitude, motivation and "claim consciousness" before reemployment of a cardiac invalid. However, in a study at the Gillette Razor Blade plant, absenteeism for disease of the cardio-vascular system was less than for diseases of the musculo-skeletal system, respiratory system and female reproductive system, while work performance rating compared most favourably with that of the average healthy employee. The place for the rheumatic heart sufferer would appear to be in smaller industries, where the individual can expect more

¹ "Cardiovascular Rehabilitation", edited by Paul Dudley White, M.D., Howard A. Rusk, M.D., Bryan Williams, M.D., and Philip R. Lee, M.D.; 1957. New York, Toronto and London: The Blakiston Division, McGraw-Hill Book Company, Incorporated. 8" x 5 1/2", pp. 168. Price: \$6.50.

personal consideration. It is obvious that the industrial physician must first train himself to assess the physical requirements for each type of occupation in the factory. Written descriptions supplied by management are not enough. Interim study of motion pictures depicting men at various types of physical work have a value, but observation of men on the job, questions and even personal assessment of the energy required for a particular operation are of much greater value.

The third topic considered by the conference was that of practice of rehabilitation. This was based firstly upon the replies to the *questionnaire* asking what were the problems actually connected with the practice of cardiovascular rehabilitation and how they could be overcome. The first question asked for definitions of rehabilitation, one of the best of which was "the art and science of restoring a person to that level of physical and mental activity which is compatible with the functional capacity of his heart". The major problem in the view of the majority was the necessity for the physician to eliminate fear of heart disease, with the consequent sense of insecurity. This attitude also has to be overcome in the patient's family. The character of the rapport between physician and patient in this regard is vital, and the education of the patient must be continued steadily at each interview. A trial of the patient at his usual occupation after recovery, with as few modifications as possible, was felt to be of equal importance. Consultations with co-professional aides were considered to be helpful only occasionally, and the responsibility of the physician should not be relegated to those in related fields. The chief value, in the opinion of most, for the social service worker, vocational counsellor, etc., was in the indigent population rather than private patients. All admitted, however, that home visits to assist in specific problems, or to demonstrate energy-saving techniques, were sometimes of the greatest assistance. Restoration of physical independence, and later of employment, is the ultimate aim of all concerned. As Dr. Howard Sprague said, "one of the best things for the patient is to know that his job is waiting for him while he is still sick".

Another "roadblock" to effective rehabilitation was stated to be a lack of elasticity in rules and regulations governing assistance agencies. The patient has to reach a certain unusually advanced grade of disablement in order to become eligible for help. Magazine articles and other media which emphasize the uncertainty of the life span are a subtle influence against rapid rehabilitation. Pensions are not part of a scheme for rehabilitation and may eliminate any hope of restoration. Unfinished litigation is equally damaging. The largest obstacle of all is the unsure physician who believes in covering all contingencies by uttering a semi-warning, which is quickly endorsed by the family and friends. Many physicians also are insufficiently informed about rehabilitation agencies and how to make use of them, and further, in seeking their assistance, do not supply a sufficiently detailed description of the physical, psychological, vocational and social status of their patients.

All this leads in one direction, that of education, firstly of physicians, then of the community. Each physician, by virtue of his own personality, experience and knowledge, develops his own approach to a sick man and to the

problems raised by the sickness. It cannot be done by a team. Training must begin in undergraduate days, and the student must be taught to appreciate the patient and his world at first contact. At the Massachusetts General Hospital, where the profession of social service began, social service rounds are held weekly in all wards, attended by students, social service workers, psychiatrists, consultants and others. Under-emphasis on the convalescent or restorative period of an illness characterizes the medical curriculum of most medical schools. Attachment of students to general practitioners or visits in the company of social service workers can be a step forwards. Post-graduate teaching in rehabilitation is increasing in the U.S.A., but has not been featured in our own post-graduate programmes. Specialists in this field will certainly arise in the not too distant future. At the Western Reserve University, where many interesting innovations into the medical curriculum have been attempted, students follow up their own patients at an ambulatory clinic somewhat in the role of the family physician. It is now planned for each student to follow five patients with, say, chronic heart disease for sixteen months continuously. At the Marquette School of Medicine, it is planned to take ten students to an industrial plant for a week to study for themselves the elements of medico-industrial relationships. This will be a vacation exercise. All agreed that "exposure" of the student to rehabilitation problems would ultimately be more rewarding than instruction in rehabilitation to the practising physician. The latter is much more difficult to arrange for the rural than the urban physicians. The American Heart Association has done much by various media towards post-graduate education, and towards lay education through the affiliated local Heart Associations. Books intended for the patient, of the "You and Your Heart" type, fill a practical need.

One psychiatrist stated his view that psychiatry should be taught not in the psychiatric ward but in the general medical wards during rounds with the attending physician. He stated that at Bellevue Hospital, where this is done, the attitude of the students and others towards "chronics" had completely changed. Dr. Rusk, who was chairman for this topic, said that he felt that the concept of rehabilitation had to be incorporated as a basic philosophy of teaching. It could not simply be delegated to the social service worker.

The final aspect considered was research. It was agreed that longer-term follow-ups of patients returned to employment were greatly to be encouraged, as well as studies of the ultimate cost to management, absenteeism, working efficiency and accident-proneness. Pilot studies of the economics of reinsurance of the partially fit, the validity of aggravation of a disability by work and many other aspects would place the hazards of reemployment on a surer footing. The basic question, "Can industry afford to employ cardiac patients?", must sooner or later be given a final answer. The influence of psychological stress on the cause of heart disease and on working efficiency also remains to be evaluated. How far has cardiac surgery aided the manual worker? Large numbers would be required to eliminate the many individual variations and give a reliable guide. Even the value of prolonged bed rest must be resubmitted to analysis.

Work classification units, vocational guidance and training have now been in operation long enough for assessment as to their importance in rehabilitation practice. Again, a wide review of the fate and behaviour of those now receiving total disability pensions would inform us whether our present criteria are accurate. Inquiry as to the ultimate effect of cardio-vascular accidents in the wage-earner upon his family would have an obvious advantage. Finally, agreement upon a common yardstick for assessing cardiac disablement and a uniform approach at all centres would simplify teaching, administration and the collection of results. In the paediatric field another group of questions arise, concerned with the special value of convalescent homes, the influence of modern prophylaxis on the course of rheumatic heart disease and the long-term results of surgical correction of congenital defects.

No one can read the report of this conference without interest, admiration for the progress made and the attitude of the participants, and a conscious blush for the relative vacuum in this field of medicine in Australia.

Current Comment.

ANTICOAGULANTS AND MYOCARDIAL INFARCTION.

NORWAY has been a major contributor to our knowledge of the action and of the control of anticoagulants. Dissatisfied with the conditions of many investigations into the long-term use of these substances, Christopher Bjerkelund¹ has recently published a monograph in which he carefully describes the background, selection of cases, and outcome of the continued employment of anticoagulants after myocardial infarction. After reviewing the relevant literature, he declares himself on the side of those who believe that efficient and prolonged anticoagulant therapy does reduce mortality and prevent thrombo-embolic complications.

His study is directed towards an answer to the question as to whether this treatment will reduce the number of subsequent infarctions in a treated as compared to a control group. He accepts the argument that thrombosis does not seem to be the cause of fatal coronary disease in more than half the cases, and therefore his series of 119 treated patients are those who have survived a definite infarction by at least one month, and who were uncomplicated by any other form of disease and who were willing to submit to regular observation and control by Owren's prothrombin-proconvertin (P.P.) test for anticoagulant effect. The controls were patients who did not continue anticoagulants for longer than one month and who were prepared to keep in touch with the investigator. All patients were under 76 years of age on admission to hospital, the drug used was dicoumarol, and the selection of patients for treatment was without any bias, depending simply on the ward to which they happened to have been admitted. Comparison of the treated and untreated groups by mathematical tests at the commencement of the investigation revealed a good basis for stating that the patients had been allotted by chance to the two groups, and that general conditions such as age, sex, weight and occupation, as well as relevant incidents in the past health, and in the clinical course of the infarct, were within the 5% level of statistical limits, with the exceptions of the systolic pressure during the first week after the attack and the highest blood sedimentation rate recorded while in hospital. The

¹The Effect of Long Term Treatment with Dicoumarol in Myocardial Infarction: A Controlled Clinical Study, by Christopher Juel Bjerkelund; *Acta Medica Scandinavica*, Supplement 330, accompanies Volume 158; 1957. Oslo: Published for the Norwegian Research Council for Science and the Humanities. 9" x 6", pp. 212; no illustrations.

management of the patients in hospital was similar in both treated and control groups. The regulation of the dose of dicoumarol was solely in the hands of the author, and the P.P. value of the blood was estimated by Owren's technique thrice weekly. Heparin was used very little. Non-cardiac complications during the first month were equally distributed between the two groups.

The important feature of the ambulatory treatment phase and non-treatment phase respectively was the personal supervision of each case by the author. He fathered both groups equally conscientiously, and performed control tests for prothrombin values every one to three weeks. The investigation lasted six years, during which almost no holidays were possible for the observer. He aimed at keeping the P.P. value (Owren) between 10% and 30%. The priming dose of dicoumarol was 250 milligrammes, followed by 200 milligrammes and 100 milligrammes on the next two days. Maintenance doses were charted on a standard graph, and a consistent P.P. level was accurately attained by alterations in dosage as small as two milligrammes per day. Decreased tolerance to dicoumarol was found to occur in heart failure and during intercurrent infections or gastro-intestinal disturbances.

Forty-two patients of the control group, and 24 of the treated group died during the period of observation. This resulted in a sum of observation times for the treated group of 5020 months, and of 4326 months for the control group. The intensity of treatment as judged by P.P. values showed that the anti-thrombotic property of dicoumarol had been exploited to the full, using the 5% statistical level; the "force of recurrence" (the tendency to recurrence) for patients under 60 years of age was significantly higher in the control than in the treated group during the first year of the observation period. It is higher in patients with several previous infarcts and in those with larger hearts.

In all there were 66 deaths in the 237 patients forming the experiment; of these, 24 (20%) occurred in the treated group and 42 (36%) in the control group. No death occurred for which dicoumarol could be indubitably blamed. There were four instances of cerebral haemorrhage in the treated group, one in the controls. The chief terminal event was recurrent infarction and heart failure. However, if we exclude the instances of cerebral haemorrhage, there were only four examples of haemorrhage of clinical significance in the control group, compared with 28 in the treated group. In over one-third of them local contributory conditions existed.

A comparison of the health and symptomatology of patients in the two groups revealed no difference in the incidence of *angina pectoris*. A return of the electrocardiogram to normal occurred three times as frequently in the treated group as in the control group, and the incidence of progressive heart failure was three times less.

Autopsies were carried out in 43 of the 66 deaths. Coronary thrombosis and thrombo-embolism were demonstrated two or three times more frequently in the controls. The presence of the original infarct was confirmed at every autopsy.

The author's final statement is as follows:

This investigation has shown that it is primarily the younger patients and those who have only had one infarct who benefit from this form of treatment. This is reasonable when it is remembered that treatment is prophylactic, not curative. Paradoxically it can therefore perhaps be said that while short-term treatment of acute myocardial infarction is primarily indicated in the so-called "poor risk" cases, long-term therapy is primarily indicated on the "good risk" cases.

Bjerkelund has carried to conclusion a most painstaking and time-consuming experiment. His report is convincing, and all variables have been most carefully assessed. It is a personal, individual effort of the highest value. Few physicians believe in the practicability of long-continued anticoagulation regime, but all will be encouraged to try hard for one year to undertake the task in their younger patients after cardiac infarction.

Abstracts from Medical Literature.

ORTHOPÆDIC SURGERY.

Self-Locking Hip Prosthesis.

A. T. MOORE (*J. Bone & Joint Surg.*, July, 1957) presents a brief survey of the history of the development of hip prostheses, with which he has been intimately concerned. The development of the intramedullary type of prosthesis began in 1950. The curved stem was at first solid, but in the latest modification it is fenestrated; after insertion of the prosthesis, these fenestrations are subsequently invaded by new bone, the prosthesis thus being locked firmly in position. It is made of vitallium. The author reports on his experience in 159 operations performed on 153 patients. The majority were inmates at the Columbia State Mental Hospital, and the selection of patients was to some extent influenced by this fact, as most of them would have been unable to cooperate with a programme of post-operative protection following the insertion of a nail. The results of the latter operation in this type of patient are poor. The use of the prosthesis in preference to the insertion of a nail is also recommended for patients with Parkinson's disease, and for hemiplegics, whose paralysis would prevent the use of crutches after nailing procedures. The operative technique is described in detail, with good illustrations of the armamentarium involved, and of various steps in the operation. In this the fibres of the *gluteus maximus* are split parallel to the lower border, and the hip joint is dislocated by internal rotation; thus any tendency to post-operative dislocation as the patient lies in bed is eliminated. In fact there was no case of post-operative dislocation in this series, and no traction was used post-operatively. In favourable cases, full range of movement may be obtained and the results on the whole are stated to be encouraging.

Reduction of Smith's Fractures.

F. B. THOMAS (*J. Bone & Joint Surg.*, August, 1957) discusses the mechanism of the Smith or reversed Colles's fracture. This fracture was first described in 1847. He states that a common mechanism is falling backwards on to the outstretched hand so that the forearm is locked in supination. As the fall continues, the twisting movement of the body causes the upper limb to be further pronated against the hand fixed to the ground. This results in a twisting and a compression. When this is understood the reduction of the fracture, which is usually easy, can be maintained much more satisfactorily by putting the forearm in full supination. It is wise to include the elbow. He points out that full pronation is almost always regained after some weeks.

The Moe Plate in Intertrochanteric Fractures.

J. C. KENNEDY *et alii* (*J. Bone & Joint Surg.*, August, 1957) describe the treatment of 254 patients suffering from

intertrochanteric fractures of the hip. The article gives a good description of the problems in those old people, their ages averaging 75 years. The plate used was designed by Dr. J. H. Moe of Minneapolis. It is curved and holds the fractures by three large lag screws. The authors state that grossly comminuted fractures are not suitable for open reduction. They do not treat these patients as emergency cases. They arrange medical consultation to get medical management of the common complications of heart, lungs and kidneys before performing the operation in daylight, with the best available equipment. Whole blood transfusion is usual before the operation. The average time before admission following the fracture was about two days, and on the average a further three days elapsed before operation. Occasionally the leg was held by skin traction in a Thomas's splint. The technique is described. Post-operative complications were not uncommon. Decubitus ulcers the authors consider to be related to incontinence, and they advise the use of an indwelling catheter. The results are graded on an anatomical and functional basis. One case of avascular necrosis is reported in this series.

Compression as Aid in Fractures.

T. KING (*J. Bone & Joint Surg.*, December, 1957) describes the results of 45 fractures treated by applying 25 pounds pressure at the fracture site supplementary to the use of internal or external splintage or of both. He lists the authors who have discussed compression, with special reference to Charnley, who reported its success when cancellous surfaces were forced together. His method was devised after a visit to the Böhler Clinic in Austria. He discusses the technique by which he aims to keep the compression force from causing overriding of the bone ends by impaling one end in the medulla of the other. Local bone chips are used as a supplementary measure. The pressure is exerted by Kirschner wires held in a stirrup, or by Steinmann pins held together by rubber bands. The author uses this method in fractures of the lower end of the humerus and fractures of the femoral shaft. In both these areas it was supplemented with intramedullary fixation. Heavily padded casts were used as well. He concludes that compression does not appear to shorten the period required for bone union, but that it is of value in the management of infected and ununited fractures. No special complications are reported.

Errors of Diagnosis in Meniscectomy.

G. MURDOCH (*J. Bone & Joint Surg.*, August, 1957) states that out of 2668 menisci removed between 1940 and 1955, 119, or 4.5%, appeared to be normal. He states that experienced surgeons will still continue to remove normal menisci, but after analysis of these cases he found the following causes of error: (i) Unreliable witness; a number of these patients appeared to be malingerers; these could be eliminated to some degree. (ii) Errors of localization; most of these errors were in the assessment of tears of the medial meniscus, which could be mistaken

for injuries of the anterior cruciate ligament. These errors were less common when careful reassessment of the history was made, keeping in mind the tendencies to make errors on the medial side of the joint. When localization is difficult the author advocates an exploratory operation. If the meniscus appears sound, then the other side of the joint should be opened; if on inspection the meniscus on this side also appears to be normal, then the first meniscus should be removed. He advises against excising both menisci, because recovery is slow and often incomplete. He reports routine arthrography to be of little value. He lists 12 conditions which simulate cartilage injury, the most important of which are quadriceps insufficiency, recurrent subluxation of the patella, loose bodies in the knee, *chondromalacia patellae* and abnormalities of the infrapatellar pads of fat. Finally, an experienced surgeon will accept the history of locking of the knee without previous history of injury in a miner, but not in people of other occupations.

Prognosis in Hypothyroidism.

D. W. SMITH, R. M. BLIZZARD AND L. WILKINS (*Pediatrics*, June, 1957) present a study of 128 children with hypothyroidism. Their findings indicate that the best results in severe cretinism, in so far as mental achievement is concerned, are obtained by early adequate treatment. Ten of 22 patients with no thyroid function treated adequately before six months of age, and 12 of 29 patients treated adequately before 12 months of age eventually reached an I.Q. greater than 90. In contrast, none of 50 patients who were inadequately treated or who were treated after 12 months of age obtained such an I.Q. Mild cretinism, with partial thyroid dysfunction, resulted in an I.Q. of 90 or greater in 13 of 32 patients even though they were not treated early. Hypothyroidism acquired after two years of age apparently exerts little or no serious irreversible effect on mental development, as 13 of 17 patients with acquired hypothyroidism achieved an I.Q. of 90 or better. Spasticity, trauma and exaggerated tendon reflexes are found frequently in severe cretinism, but not in mild cretinism or acquired hypothyroidism. The severity of these signs is proportional to the degree of mental retardation. Early treatment apparently prevents in part these sequelae, as only four of 22 patients with severe cretinism treated adequately in the first six months of life had these findings, but 22 of 57 patients treated after this age, or inadequately treated in the first six months were afflicted with neurological sequelae. Early adequate therapy may fail to establish normal mentality in a certain percentage of patients. Twelve of 22 patients treated adequately in the first six months of life did not attain an I.Q. of 90 or greater. These patients apparently incurred such severe damage to the brain *in utero* that normal cerebral function could never be established.

Reaction of Articular Cartilage to Injury.

J. W. LANDELLS (*J. Bone & Joint Surg.*, August, 1957) states that there has been little published on the reactions

of human articular cartilage to injury and repair. He considers the changes that follow simple mechanical injuries to joint cartilage. The material studied was affected surfaces removed at operation or at necropsy, three to ten days after injury. He describes the histology and notes the division between the ossified and unossified cartilage. He calls this the "tidemark". He notes that the subchondral plate is formed as islands in the young. These islands unite to make the lamella of bone beneath the cartilage. In the hyaline cartilage there are also vertical lines where breaks occur. Horizontal flaking may occur along the tidemark. When the hyaline cartilage is depressed, its elasticity prevents severe destruction from brief compression. When the break is complete, repair has to fill gaps that are left in the hyaline cartilage or to cover bone where cartilage is displaced. These gaps are filled with fibrous tissue that is derived from granulations which arise from the bone beneath the gaps. This fibrous tissue becomes smooth with the action of the synovial fluid. Fibrous tissue can grow over exposed bone, and displaced cartilage can survive in the synovial fluid. Cartilage will not survive in granulation tissue or in callus. This seems to be due to the increased oxygen supply that is present in this type of tissue which is higher than the usual oxygen supply needed by cartilage. When the fractures are incomplete microscopic sections show slipping and herniation of the elastic hyaline cartilage in relation to the underlying bone. Fissuring may also occur. The author considers that these defects are clearly related to osteoarthritis, and that while minor injury will have a more serious effect on cartilage that is degenerate, trauma alone could account for degenerative changes in healthy cartilage.

PÄEDIATRICS.

Needle Biopsy in Nephrosis.

E. GALAN AND C. MASO (*Pediatrics*, October, 1957) describe the findings obtained by needle biopsy of the kidney in 20 children with nephrosis. A biopsy was first done in the early stages of the disease, and subsequently after intensive steroid therapy. Glomerular involvement was found in all patients, but all nephrons were not uniformly affected, the percentage ranging from 5% to 100% in different specimens. Thickening of the capillary basement membrane was present in 90% of patients and in 32% of the glomeruli studied; cellular proliferation in 65% of patients and in 17% of glomeruli; hyalinization in 55% of patients and in 9% of glomeruli; and fibrosis in 65% of patients and in 13% of glomeruli. Lesions of various types were simultaneously present in most cases, but thickening of the capillary basement membrane was the predominant lesion. Adrenal steroid therapy was given to induce a complete clinical and biochemical remission of the nephrotic syndrome. This result was obtained in 81% of the children treated. Histological improvement was observed in 90% of patients

who had a biopsy performed before and after treatment. Administration of a maintenance dose of steroid hormone was necessary for prolonged biochemical remission. Administration of prednisone seemed to decrease cellular proliferation and to arrest the progress from thickening of the capillary basement membrane to obliteration of the glomerular capillary. The impression was gained that improvement was not permanent unless spontaneous healing occurred, and that longer observation is required to evaluate the effect of prednisone.

Cranial Decompression in Lead Encephalopathy.

R. L. MC LAURIN AND J. B. NICHOLS (*Pediatrics*, October, 1957) present a report on seven patients who were treated for severe lead encephalopathy by massive bilateral cranial decompression. Of the seven patients five are alive. One of the fatalities resulted from gastrointestinal haemorrhage one week later, although it is believed the encephalopathy was controlled. There is significant mental retardation present in two of the surviving patients, and the remaining patients cannot be accurately evaluated at the present age. One of the two showing definite retardation also had craniosynostosis which may itself be associated with cerebral dysfunction. The authors advocate the more widespread use of decompression as a life-saving measure, and they suggest that not only may life be saved but mental function may be less severely impaired following lead encephalopathy if cerebral decompression is undertaken when it becomes apparent that the course of the disease is not being altered by medical agents.

Intracranial Complications of Leukæmia.

M. P. SULLIVAN (*Pediatrics*, November, 1957) describes the intracranial complications in children with leukæmia. She points out that in untreated patients involvement of the meninges and brain were not unusual in both acute and chronic disease, but that resultant clinical symptoms were not often noted. In the English literature she found only nine published reports suggestive of increased intracranial pressure in untreated patients. In children treated with steroid hormones and chemotherapy, however, it appears to be more common, and she reports that approximately one-quarter of the children treated in the Anderson Hospital and Tumour Institute of Texas in the last 18 months have developed this complication. Symptoms and signs are variable but usually include irritability, headache, vomiting, papilloedema, separation of sutures, increase in circumference of the head, increased pressure and concentration of protein in the spinal fluid, and normal or low concentration of sugar. In rare instances children with this syndrome have also developed hypertension, increased appetite with resultant obesity and various neurological anomalies. The reason for the changes is unknown. The available evidence suggests such agents as 6-mercaptopurine and "Methotrexate", which are known to cross the blood brain barrier in greatly reduced amounts, fail to control the

intracranial progression of leukæmia, even though the disease may be under fair control elsewhere in the body. The most effective treatment for this complication at the present time is X-ray therapy to the entire skull. There is also some evidence that adrenal steroid hormone by mouth will have some effect if resistance to this type of treatment has not already developed. The small number of reports of increased intracranial pressure in leukæmic patients before any effective treatment was available is probably due to the rapid progress of the disease elsewhere in the body causing death before cerebral symptoms became apparent.

MEDICINE.

Lupus Erythematosus Following Medication with Mesontoin.

T. LINDQUIST (*Acta med. scandinav.*, August 13, 1957) records two cases of classical disseminated *lupus erythematosus* following the use of "Mesontoin" in the treatment of idiopathic epilepsy. In view of similar cases following the use of "Apresoline", the author concludes that the syndrome of disseminated *lupus erythematosus* is probably not an aetiological entity but a specific mode of reaction to various inciting factors.

Megaloblastic Anaemia in Pregnancy.

B. COWAN (*Scottish M. J.*, November, 1957) reports an incidence of nine cases of megaloblastic anaemia of pregnancy among 1850 admissions in one year to a provincial obstetric centre at Dumfries, Scotland. This is considerably in excess of previously reported incidence figures, except from Ireland. Only one case occurred in a *primipara*, two occurred in the second pregnancy and two had megaloblastic anaemia during a previous pregnancy. Six presented between the thirty-fourth and thirty-eighth weeks of pregnancy, two just after delivery and one in the sixth week of the puerperium. Folic acid in doses of 10 milligrammes twice daily gave uniformly a satisfactory and sustained response.

Antibiotic Treatment in Dysentery.

R. JOHNSON AND J. B. LANDSMAN (*Scottish M.J.*, October, 1957) report their experience in Glasgow of the treatment of 479 persons with bacillary dysentery, of whom 64% were under the age of five years. No difference could be detected in the results between Sonne and Flexner infections. Chloramphenicol and combinations of sulphonamides with neomycin or streptomycin had poor bacteriological cure rates; chlortetracycline and oxytetracycline produced bacteriological cure in 96% of cases, in relatively low dosage, but chlortetracycline resulted in a higher incidence of vomiting and other side effects. Children in the first year of life accounted for the highest proportion of those in whom treatment failed to produce bacteriological cure.

British Medical Association.

MEETING OF THE FEDERAL COUNCIL.

A MEETING of the Federal Council of the British Medical Association in Australia was held on February 26, 27 and 28, 1958, at Wrest Point Hotel, Hobart, Dr. H. C. COLVILLE, the President, in the chair.

REPRESENTATIVES.

The following representatives of the Branches were present:

New South Wales: Dr. W. F. Simmons, Dr. A. J. Murray, Dr. R. H. MacDonald, Dr. E. F. Thomson.

Queensland: Dr. A. E. Lee, Dr. D. P. Sapsford.

South Australia: Dr. L. R. Mallen, Dr. C. O. F. Rieger.

Tasmania: Dr. L. N. Gollan, Dr. M. W. Fletcher (proxy for Dr. J. B. G. Muir).

Victoria: Dr. H. C. Colville, Dr. J. G. Johnson, Dr. T. G. Swinburne.

Western Australia: Dr. C. W. Anderson, Dr. D. M. Clement.

The President referred to the retirement from the Council of Dr. H. W. Horn, Dr. J. G. Wagner and Dr. R. Southby, and the Federal Council placed on record its appreciation of the valuable services rendered to the Council and to the profession in Australia by them whilst they were members of the Federal Council.

DEATH OF DR. MERVYN ARCHDALL.

The President referred to the death of Dr. Mervyn Archdall, which had occurred on September 6, 1957. He mentioned the letter, a copy of which had been supplied to all the members of the Council, in which Dr. Archdall had expressed his appreciation and pleasure at the action of the Federal Council in awarding to him the Gold Medal of the British Medical Association in Australia, and pointed out that the letter had been written a short time before Dr. Archdall's death. Dr. Angus Murray reported that subsequently the Gold Medal had been presented to Mrs. Archdall, and that at her request the medal was to be hung below Dr. Archdall's portrait in the T. W. Lipscomb Room at The Printing House, Seamer Street, Glebe. Those present stood, as a mark of respect to the memory of Dr. Archdall.

APPOINTMENT OF OFFICE-BEARERS.

Only one nomination was received for the position of President, that of Dr. H. C. Colville. Dr. Colville was declared elected.

Only one nomination was received for the position of Vice-President, that of Dr. A. J. Murray. The President declared Dr. A. J. Murray elected.

Only one nomination was received for the position of Honorary Treasurer, that of Dr. W. F. Simmons. The President declared Dr. Simmons elected.

ANNUAL REPORT OF THE COUNCIL.

The General Secretary presented the annual report of the Federal Council for the twelve months ended December 31, 1957. The report was received.

SECRETARIAT.

The President, the General Secretary and others made reference to the completion of the first twelve months of service of the Assistant General Secretary, Dr. A. McNeil, and a suitable adjustment was made to his salary.

FINANCE.

The Honorary Treasurer, Dr. W. F. Simmons, presented the annual financial statement and balance sheet of the Federal Council as at December 31, 1957. He pointed out that there would be a heavy outlay for the Tenth Session of the Australasian Medical Congress (B.M.A.), to be held in Hobart in the first week of March, 1958, but the general position of the finances of the Federal Council was satisfactory. The financial statement and balance sheet were adopted.

Dr. Simmons then presented a statement of the per-capita payments of the Branches for the year 1958.

Presenting a statement on the Organization Fund for the year ended December 31, 1957, Dr. Simmons pointed out that interest received had increased this fund by just on £50, and it now stood at £1589.

Dr. Simmons also presented a statement of the Federal Independence Fund for the year ended December 31, 1957. It had changed only by the addition of bank interest, and now stood at £23,225.

Dr. Simmons then presented a statement of the Entertainment Fund for the year ended December 31, 1957; it stood at £269.

F. W. Duesbury and Company were appointed auditors for the ensuing year. The amount of the auditors' fee was left in the hands of the executive officers.

The General Secretary referred to correspondence that had taken place with Harvey Trinder (N.S.W.) Pty. Ltd. with regard to the nomination of the next of kin as the sole beneficiary of the travel insurance policies for members of Council and for the secretariat. It was resolved that the General Secretary be instructed to make the necessary arrangements with Harvey Trinder (N.S.W.) Pty. Ltd. for insurance policies covering all travel by any means of transport by members of the Federal Council and by the secretariat while on the business of the Federal Council to be endorsed nominating the next of kin as the sole beneficiary of the policy in the event of the insured's death. It was also decided that a copy of the relevant correspondence be forwarded to Branch Councils for their information.

HENRY SIMPSON NEWLAND PRIZE IN SURGERY.

Dr. W. F. Simmons presented the financial statement for the Henry Simpson Newland Prize Fund, the amount of which stood at £1103.

The General Secretary reported that the Henry Simpson Newland Prize in Surgery had been awarded for an essay submitted by Dr. Neville C. Davis, of Brisbane. The prize would be presented during the forthcoming session of Congress.

MEDICAL OFFICERS' RELIEF FUND (FEDERAL).

Dr. Simmons presented the report of the trustees of the Medical Officers' Relief Fund (Federal) for the twelve months ended December 31, 1957. The amount of the fund stood at £7101. Dr. Simmons pointed out that during the year the amount of £414 had been paid to four beneficiaries.

The General Secretary reported that, as the result of a resolution of the Federal Council at its meeting in August, 1957, the trustees of the fund had obtained legal advice on the winding up of the fund. The advice had been received that the fund could not be wound up or incorporated in any other fund without reference to the Court, and that it was unlikely that even then the Court would agree to this. However, the surplus of the fund could be applied by the trustees for the purpose of financially assisting indigent and deserving medical practitioners whether they were engaged in war service in the 1914-1918 war or not or the dependents of such medical men in such manner and amounts and otherwise generally as the trustees might determine. The report of the trustees was received and adopted, and the correspondence with regard to the dissolution of the fund was received.

FEDERAL MEDICAL WAR RELIEF FUND.

Dr. Simmons presented a report on behalf of the trustees of the Federal Medical War Relief Fund for the year ended December 31, 1957. He said that the assets of the fund amounted to £17,098, and that during the year the amount of £1408 had been paid to 14 beneficiaries. The report was received and adopted.

HONOURS.

The General Secretary reported that messages of congratulation had been forwarded to the following members who had received honours in the New Year list: Sir Ralph Whishaw, Kt., Sir William Upjohn, Kt., Sir Ronald Grieve, Kt., Dr. H. Crawford, C.B.E., Dr. L. R. Mallen, O.B.E.

The General Secretary also reported that messages of congratulation had been sent to Sir Howard Florey on his award by the Royal Society of the Copley Medal for distinguished contributions to experimental pathology and medicine, to Sir Neil Hamilton Fairley for his award by the Royal Society of the Buchanan Medal for contributions to the control of malaria, and to Mr. B. K. Rank on his appointment as Sir Arthur Sims Commonwealth Travelling Professor for 1958.

INQUIRIES FROM OVERSEAS.

The General Secretary reported that he had received a number of letters from doctors overseas, inquiring about conditions of practice in Australia, and had sent a suitable reply in each case. Information had also been given in response to inquiries about emergency care and medical facilities available in Australia for tourists and other travellers, and about vacancies for psychiatric social workers in general hospitals in Australia.

INJURIES TO CHILDREN'S HANDS FROM ELECTRICAL RADIATORS.

The General Secretary read a letter from Dr. David L. Dey, of Sydney, in which he drew attention to the crippling injuries to children's hands resulting from burns caused by electric radiators. Dr. Dey asked that the Federal Minister for Health be requested to initiate legislation to provide for compulsory fitting of adequate grills on radiators. After discussion, it was resolved that the request made by Dr. Dey regarding the compulsory fitting of adequate grills on radiators be supported, and that the matter be referred to the National Health and Medical Research Council and to the Standards Association of Australia.

OVERSEAS CONFERENCES.

The General Secretary referred to notices that had been received regarding a number of overseas conferences. The N.A.P.T. Commonwealth Chest Conference would be held in London from July 1 to 4, 1958. The Fifth International Congress on Diseases of the Chest would be held in Tokio from September 7 to 11, 1958. The Fourth International Conference on Goitre would be held in London in 1960, and an International Seminar on Health Education, arranged by the Central Council for Health Education, London, would be held in London from April 22 to 25, 1958.

BLUE CROSS ASSOCIATION OF AUSTRALIA.

The General Secretary referred to a request from the Blue Cross Association of Australia, seeking the Federal Council's attitude to a proposal of the Blue Cross Association to include the emblem of the staff of Esculapius in the Blue Shield emblem in Australia. The Federal Council approved the President's action in advising the Blue Cross Association that no objection would be taken to the use of the emblem in the way indicated.

ASSOCIATIONS OF DOCTOR-MOTORISTS.

The General Secretary referred to correspondence that had been received from the International Union of Associations of Doctor-Motorists in the Netherlands, in which information was provided about the activities of the Dutch Association of Doctor-Motorists and the International Union of Associations of Doctor-Motorists. These associations had as their main objects (i) to assist in the problem of road accidents and (ii) to offer facilities for travelling doctor-motorists.

AUSTRALIAN ASSOCIATION OF OCCUPATIONAL THERAPISTS.

The General Secretary referred to a letter received from the President of the Australian Association of Occupational Therapists, in which it was stated that the Association was anxious to obtain the British Medical Association's recognition of their standards of training for occupational therapists in Australia. The Association had agreed to accept the minimum educational standard as laid down by the World Federation of Occupational Therapists as the educational standard for admission to the Association. In subsequent discussion it was pointed out that the main issue was the recognition overseas of the standard of training of the Australian Association, in order that there might be reciprocity of registration. The Federal Council resolved to give support to the recognition of the standard of training of the Australian Association of Occupational Therapists.

POSSIBLE VISIT TO THE U.S.S.R.

The General Secretary read a letter from Dr. W. H. Ward, of Newcastle, who had recently visited the U.S.S.R., in which he inquired on behalf of VOKS, a society for cultural relationship with the U.S.S.R., as to the attitude of the Federal Council to the possibility of an official visit by representatives of the Federal Council of the U.S.S.R. After consultation with the President of the Federal Council, the General Secretary advised Dr. Ward that such an invitation would not be refused. The Federal Council approved the President's action.

AUSTRALIAN SOCIETY OF ANAESTHETISTS.

The General Secretary reported that he had received from the Australian Society of Anaesthetists a copy of a letter sent to the Department of the Treasury at Canberra by the Australian Society of Anaesthetists, expressing dissatisfaction with the existing sessional rates paid to anaesthetists from the Defence Department. It was resolved that the Australian Society of Anaesthetists be informed that the Federal Council of the British Medical Association in Australia should be the only avenue of approach to the Commonwealth Government in any matters affecting the medical profession.

MOTOR-CAR SAFETY BELTS.

The General Secretary referred to a communication which he had received from the Swedish State Power Board, with which they had forwarded a report on experimental studies to design a motor-car safety belt to reduce serious injuries from car accidents.

PHARMACEUTICAL SERVICE IN SOUTH AUSTRALIA.

The General Secretary referred to a letter received from the South Australian Branch, drawing attention to the fact that the Federated Pharmaceutical Service Guild of Australia (South Australian Branch) had recently decided to close pharmacies on Saturday evenings as from February 1, 1958. That meant that a patient receiving a prescription after midday on Saturday would in most cases be unable to have it dispensed before the following Sunday evening. The South Australian Branch considered that the Guild was not providing a satisfactory service. The Federal Council resolved to draw the attention of the Federated Pharmaceutical Services Guild of Australia to the complaint of the South Australian Branch, and to ask for its comments.

AUSTRALASIAN MEDICAL CONGRESS (BRITISH MEDICAL ASSOCIATION).

Tenth Session.

The minutes of the meetings of the Executive Committee of the Tenth Session of the Australasian Medical Congress (British Medical Association), to be held in Hobart from March 1 to 7, 1958, were presented, as also was a statement of receipts and payments relating to the Congress for the period ended October 31, 1957.

The General Secretary reported that, owing to the visit of Her Majesty the Queen Mother, advice had been received that His Excellency Field Marshal Sir William Slim, the Governor-General of Australia, would be unable to attend the inaugural meeting. His Excellency the Governor of Tasmania, the Right Honourable Sir Ronald Cross, had accepted the invitation to open Congress at the inaugural meeting.

The General Secretary also reported that, owing to the visit of the Queen Mother, the Prime Minister, the Right Honourable R. G. Menzies, who had been invited to deliver the third Henry Simpson Newland Oration, had advised that he could not be in Hobart on Thursday, March 6, 1958, and for that reason the night on which the oration was to be delivered had been changed to Wednesday, March 5, 1958.

A further list of names of persons submitted by the Executive Committee for appointment as honorary members of Congress was approved.

It was reported that, in accordance with the resolution of the August, 1957, meeting of the Federal Council, a gavel had been made for presentation to the University of Tasmania, in recognition of the facilities extended by the University to Congress.

Eleventh Session.

Further discussion took place on the request of the College of General Practitioners that a section of general practice be included in future sessions of the Australasian Medical Congress (British Medical Association). After consideration of the views of the individual Branches on the subject, it was resolved not to approve the suggestion.

A letter was received from the New South Wales Branch, in which the opinion was expressed that combined sessions were appreciated more than sessions limited to one specialty, and in which the Federal Council was asked to give consideration to reducing to a minimum those sessions confined to one specialty only. After discussion, it was decided to defer consideration of the matter till the next meeting of the Federal Council, when it would be possible to take into account the additional experience of the Tenth Session.

**AUSTRALASIAN MEDICAL PUBLISHING COMPANY LIMITED.
"Family Doctor."**

Further discussion took place on the suggestion that a popular medical magazine should be published in Australia along the lines of "Family Doctor". A letter was read from the Secretary of the Australasian Medical Publishing Company Limited in reply to a request from the Federal Council that ideas should be submitted as to a suitable format for publication in Australia of a popular health journal. The Federal Council decided to defer consideration of the matter for a further twelve months.

Per-Capita Payment.

The General Secretary referred to a letter from the Australasian Medical Publishing Company Limited, advising that there would be no alteration in the present per-capita payment of £1. Of this, 10s. was for the supply of the Journal, and 10s. for credit to the building fund trust account. For the latter, series E debentures would be issued to the several Branches.

MEDICAL PLANNING.

National Health Service.

National Health Act.

The General Secretary referred to a Bill to amend the *National Health Act*, 1953-1956, a copy of which had been sent to the Branches and to the members of the Federal Council. The Bill had subsequently been passed, and was designated the *National Health Act*, 1957. January 1, 1958, had been proclaimed as the date of operation.

Commonwealth Health Insurance Council.

At its meeting in August, 1957, the Federal Council decided to communicate with the Minister with regard to the establishment of the Commonwealth Health Insurance Council, and to point out that it failed to see the necessity for the supersession of the Federal Advisory Committee. Furthermore, it considered that the medical representation suggested for the proposed Commonwealth Health Insurance Council was inadequate, and put forward what it regarded as suitable representation. However, in the event of its representations not being acceptable to the Minister, it nominated Dr. A. E. Lee as its representative on the proposed Commonwealth Health Insurance Council.

The General Secretary reported that a letter in the terms of the resolutions had been forwarded to the Director-General of Health. In his reply, the Director-General had said that he would like to make clear the functions of the Commonwealth Health Insurance Council. The Council was intended to take the place of the Federal Advisory Council on Medical Benefits, which had been established in July, 1953, under the *National Health Service Act*, to advise on matters relating to the Medical Benefits Scheme, and which had automatically ceased to exist when that Act was repealed in December, 1953, by the *National Health Act*. The present proposal was designed to establish a comparable body, with functions extended to include hospital insurance benefits. The existing State and Federal committees of inquiry would not be affected in any way. The Director-General had also stated that the submissions of the Federal Council had been brought to the Minister's notice as requested. However, the Minister concurred in the view that, as the old Federal Advisory Council on Medical Benefits included only one member representing the British Medical Association, similar representation on the new council would seem to be appropriate. Having regard to the position outlined, the Director-General had said that he would appreciate confirmation that Dr. A. E. Lee was nominated as the representative of the Federal Council. The General Secretary said that that confirmation had subsequently been made.

Section 37.

The General Secretary referred to a communication from the Victorian Branch, drawing attention to the possibility of the imposition of a substantial penalty on a member, following a recent recommendation of the State Committee of Inquiry, and recommending that further representations be made to the Minister for Health to provide for the right of appeal against penalties imposed under the *National Health Act*. He said that the matter had been referred to the Minister for Health, but as yet there had been no reply. The matter would be followed up further.

Future of the National Health Service.

At its meeting in August, 1957, the Federal Council drew up a series of suggestions of ways in which the present

National Health Service could be made more attractive to the public, and in other ways made more satisfactory. It further resolved to approach the Minister for Health, requesting him to arrange for a deputation of the Federal Council to meet the Prime Minister to discuss the future of the National Health Service. An interchange of correspondence subsequently took place with the Minister for Health, who then met the representatives of the Federal Council in conference. The deputation presented to the Minister the various points set out in the Federal Council's original resolution.

A discussion then took place on a recommendation which had come from the Victorian Branch, urging the immediate initiation of a publicity campaign with regard to a national health service. The views of the other Branches were presented, and it was finally resolved that the Federal Council should initiate a publicity campaign in regard to a national health service, the publicity committee to consist of the President, the General Secretary, Dr. T. G. Swinburne, Dr. E. F. Thomson and Dr. A. E. Lee. It was further decided that any necessary expenditure by the publicity committee should be made out of the current account of the Federal Council, until the question of reimbursement from the Federal Independence Fund had been determined. In the discussion the General Secretary stressed the fact that the best public relations were those resulting from the contact of doctors with their own patients.

Pensioner Medical Service.

The General Secretary reported on the result of further representations that had been made to the Commonwealth Government, in an attempt to obtain an increase in the fees payable to medical practitioners rendering service under the Pensioner Medical Service. After discussion, it was resolved that the opinion of the Branches should be sought as to whether the Federal Council should enter into a new agreement with the Commonwealth Government in the event of the Government offering an increase of rates less than that asked for by the Federal Council, and that on receipt of the replies of the Branches the decision of the majority on the matter should be accepted as the policy of the Federal Council.

It was further resolved that, in the event of a new agreement being entered into by the Federal Council with the Commonwealth Government, the period of the agreement be two years.

General Pharmaceutical Benefits.

The General Secretary referred to a letter that had been received from the New South Wales Branch, pointing out the practical difficulties which members experienced in obtaining stocks of certain pharmaceutical benefits for the treatment of their patients. The difficulties arose as a result of the manner in which the Act and its regulations operated. It was recommended that an approach be made to the Commonwealth Government, to alter the regulations under the *National Health Act*, to permit doctors to hold reasonable stocks of necessary pharmaceutical benefits. After consideration of the views of the individual Branches, and further discussion, it was decided to take no further action at present.

Medical Services Committees of Inquiry.

At its meeting in August, 1956, the Federal Council supported a proposal that, where notice of action taken against a medical practitioner was published in the *Commonwealth of Australia Gazette*, a summary of the findings of the Committee of Inquiry could be furnished to the relevant medical board, provided always that a specific request was initiated by that medical board. At its meeting in August, 1957, the Federal Council rejected a proposal that the information be forwarded where the Committee of Inquiry deemed the action advisable. However, in view of the fact that correspondence with the Minister for Health revealed that no requests for such information had been made by medical boards, since the Minister's first submission in February, 1956, it had been decided to ascertain the Minister's opinion of the suggestion that medical boards should be advised that the information previously referred to would be made available on specific request. In his reply the Minister had stated that it seemed to him that the proposal would amount to an invitation to the medical boards to request the information. He said that while he believed that it would be reasonable to meet a specific request by a State medical board by furnishing a very brief statement in general terms of the reasons for action taken against a medical practitioner and notified in the *Gazette*, he did not

feel that he should actually invite the boards to request the information. No further action was taken in the matter.

The General Secretary referred to notifications which had appeared in the *Commonwealth of Australia Gazette* relating to the reprimand of four medical practitioners.

Medical Benefits.

The General Secretary referred to a copy of Amendments to the Schedule of Medical Benefits, which appeared in the *National Health Bill, 1957*. The copy of the Amendments had been received from the Minister for Health.

A letter was received from the Victorian Branch, requesting the Federal Council to protest to the Minister for Health at the failure to consult the organized profession in determining alterations to the schedules in the *National Health Act*. The question was discussed at some length, and it was pointed out that the Government had not failed to consult the organized profession, but that it had not adopted a great many of the Federal Council's recommendations. It was finally decided that the Minister for Health should be informed that, while appreciating the fact that some recommendations in regard to anomalies were included in the schedule of medical benefits, the Federal Council regretted that many more were not approved. The Federal Council trusted that, in the event of any further alterations, an opportunity would be afforded for consultation before final determination.

Benefit for Proof Puncture of Maxillary Sinus.

A letter was received from the South Australian Branch, enclosing a copy of a letter which had been received from a member of the Branch, drawing attention to the fact that no rebate was payable by voluntary health insurance organizations when a patient had a proof puncture of the maxillary antrum carried out as a diagnostic measure. After discussion it was decided to recommend to the Minister for Health that in addition to the consultation benefit, a benefit be payable for proof puncture of the maxillary antrum when carried out as a diagnostic measure.

Identification of Services in Itemized Accounts.

The General Secretary referred to a letter received from the Director-General of Health, Canberra, stating that since the introduction of the Medical Benefits Scheme medical practitioners had assisted contributors to obtain the benefits of the scheme by providing sufficient itemized details in their accounts to indicate the nature of the professional services rendered. Latterly some medical practitioners had adopted the practice of identifying services by reference to the item number in the Commonwealth Schedule of Benefits. That had created difficulties for both contributors and organizations, and on occasions it had been found that incorrect item numbers had been quoted in the accounts. As from January 1, 1958, new schedules of benefits had been introduced, and there had been a complete renumbering of the schedule items. Consequently, a description of services by item numbers only in doctors' accounts would almost certainly create confusion, and lead to delays and difficulties particularly during the early months of use of the new schedules. It was therefore suggested that the Federal Council might consider issuing a special circular to all doctors, appealing to them to include in their accounts sufficient details to permit ready identification of the services rendered, and not to regard the inclusion of the schedule item number as sufficient. After presentation of the views of the several Branches and discussion, the Federal Council expressed the view that the procedure suggested by the Director-General of Health was unnecessary. However, it was resolved that the attention of members should be drawn to the new schedule and to the renumbering of items, and that they be requested during the changeover period to write in the nature of the services as well as the item numbers. In addition, the Federal Council decided to draw the attention of the Minister for Health to the fact that it considered that in the renumbering of schedule item numbers in the future, the number previously used for an item should not be used for any other item.

Bonus for Continuous Membership, and Benefits for Preexisting Disease.

A letter was received from the Western Australian Branch, advising that it was of the opinion that there should be a means of providing a bonus for continuous membership of a medical fund, and also adequate benefits for persons with preexisting disease. The General Secretary reported that the letter had been referred to the Branches, and in general the proposals had been either disapproved of or regarded as

impracticable. No further action was taken by the Federal Council in the matter.

Bulletin of Statistics.

The General Secretary referred to the latest bulletin of statistics relating to the medical and hospital benefits schemes, copies of which had been supplied to all members and to the Branches.

Hospital Benefits.

A letter was received from the Western Australian Branch, in which it was recommended that both fund and Commonwealth benefits should be payable in respect of the mother's and the baby's hospital accounts, where babies were hospitalized with sick mothers. The matter was referred to the Branches. The Council of the Queensland Branch, while sympathetic to the principle that assistance should be available in such cases, did not consider that payment from sickness benefits funds could be made in respect of well children. It considered that social aid should be available in such cases. The Council of the New South Wales Branch disagreed with the proposal of the Western Australian Branch, and expressed the opinion that benefits should be paid in respect of both mother and infant only if both were patients. The Councils of the Victorian, South Australian and Tasmanian Branches supported the recommendation of the Western Australian Branch. During the subsequent discussion, it was generally agreed that there were practical difficulties in the way of adopting the procedure, but it was finally resolved to recommend to the Minister for Health that where a nursing mother was hospitalized and a charge was made by the hospital for accommodation for the breast-fed baby, both fund and Commonwealth benefits should be payable in respect of the mother's and the baby's hospital accounts.

Vaccination Against Poliomyelitis.

At its meeting in August, 1957, the Federal Council decided to approach the Commonwealth Health Department to have Salk vaccine made available to general practitioners when it became practicable to do so. A letter was subsequently received from the Minister for Health, in which he gave the assurance that poliomyelitis vaccine would be made available to the general practitioner as soon as was conveniently possible. The reply was regarded as satisfactory. It was pointed out in the discussion that the response to the campaign for Salk vaccination of people in the age group of 14 to 48 years had been negligible.

Report of Committee on Australian Universities.

The General Secretary referred to the report of the Committee on Australian Universities, commonly referred to as the Murray Report, and outlined the developments that had taken place in New South Wales in relation to a new medical school.

Interstate Transfer of Medical Registration.

At its meeting in August, 1957, the Federal Council resolved to discuss with the Commonwealth Minister for Health the principle of uniform registration of medical practitioners throughout the Commonwealth. The General Secretary reported that in his reply the Minister had said that, as an ideal in the growth of the Commonwealth as a nation, and as a practical procedure in a well-established community, the adoption of uniform conditions for the registration of medical practitioners had a great appeal, and there could be little argument against its desirability. It must be recognized, however, that in the present stage of the Commonwealth's development there were a number of problems, such as the recognition of overseas qualifications and the need to provide medical care for persons in the outback, which influenced the various States in their approach to the main question. Each State was influenced by the degree of importance of the problem or problems in its own particular area, and the geographical size of the Australian continent alone was sufficient to create a large variation in the local importance of the problems referred to. The Minister considered that those factors would mitigate against any rapid or full attainment of the objective of the Federal Council. In a subsequent letter, the Western Australian Branch had recommended that a serious attempt should be made to overcome difficulties at present associated with introducing Australia-wide registration. The matter was discussed further, but the Federal Council took no action.

Proclamation of Dangerous Drugs.

At its meeting in August, 1957, the Federal Council resolved to take up with the Commonwealth Government the matter of the proclamation of drugs coming within the

definition of a dangerous drug, and to recommend that in future proclamations, in addition to the clinical name of any particular drug, the synonym and trade name of each should also be included. The General Secretary reported on subsequent correspondence with the Director-General on the subject. It was stated that synonyms and trade names, when available, were supplied to the State authorities. However, in many cases these were not available. The information with regard to the drugs came from the World Health Organization, and a great number of them probably never reached Australia. The Federal Council decided that no further useful action could be taken.

Life Assurance Offices: Standard Form for Specialist Reports.

At its meeting in August, 1957, the Federal Council decided to discuss with the Life Offices Association of Australia the following two matters: (a) the adoption of a standard form to be used by all life offices throughout Australia when specialist reports were requested; (b) the adoption of a standard fee of three guineas for the completion of such reports. The General Secretary reported that, in a reply received from the Life Offices Association for Australasia, it had been agreed that some advantage might accrue from uniformity in such a matter, but there would be also some disadvantages. Some member offices had intimated that the number of inquiries made by them for specialists was not great and would not warrant the expense of the printing of a form. Others thought that each inquiry to a specialist had its own particular purpose, and that any uniform method of approach or of answer would be undesirable, whilst many preferred that the inquiry should be made in correspondence form, and that the specialist should reply in like manner. There was also the practical difficulty of adequately defining the word "specialist" in any arrangement, and that would undoubtedly lead to confusion concerning the occasions on which the form should be put into operation. Member offices therefore preferred continuance of the present practice, whereby the inquiry was made in a manner desired by the inquiring office, and considered that in each instance the fee should be a matter for agreement by the two parties concerned, having regard to the nature of the inquiry and the answer. No further action was taken.

Tetanus Injections to Members of the Australian Stevedoring Industry.

A letter was received from the South Australian Branch, seeking information regarding circumstances under which tetanus injections were given to members of the stevedoring industry throughout Australia. The General Secretary said that the matter had been referred to the Branches, and it had been learnt that such injections had been given by a doctor acting officially under the control of the stevedoring industry authority, and that satisfactory arrangements had been made for the recording of such injections on a card. The information had been sent to the South Australian Branch, and the position was now satisfactory.

Hospital Administration.

The General Secretary reported the receipt from the New South Wales University of Technology of a prospectus for 1957 of the School of Hospital Administration at the University.

Regional Blood Banks.

A letter was received from the New South Wales Branch, asking that the Federal Council give consideration to the adoption of a general policy on the establishment of regional blood banks in Australia. The subject had been initiated by a letter received from the Albury Base Hospital relating to the establishment of a regional blood bank at that hospital. The matter was referred to the Branches and the following replies were received. In Queensland eleven regional blood banks were established with storage of blood being permitted for seven to ten days. In Victoria there were twelve regional blood banks with permissible blood storage for fourteen days. In South Australia no regional blood banks were established, but one would shortly be opened at Mount Gambier with a probable period of storage of fourteen days. In Western Australia there were two regional blood banks, and blood was stored for fourteen days. In Tasmania there were five established regional blood banks where blood was stored for fourteen days. After discussion it was decided to inform the New South Wales Branch that the Federal Council, having considered the communication from the Albury Base Hospital, had no desire to alter existing arrangements.

Free Supply of Blood for Transfusion.

As a result of a letter received from the National Transfusion Committee of the Australian Red Cross Society, the Federal Council decided to ask Branch Councils to request their members to take every opportunity to inform their patients that blood for transfusion was supplied free of charge by the Red Cross Blood Transfusion Service, and that it was the gift of voluntary donors.

ORGANIZATION OF THE PROFESSION.

Procedure in Medico-Political Matters.

At its meeting in August, 1957, the Federal Council decided that it would once again make strenuous attempts to obtain from the various Colleges and Faculties within the profession acceptance of the principle that they should confine their activities to scientific and domestic matters, and that all negotiations with outside bodies should be left in the hands of the British Medical Association, on condition that where the matter in question was of sectional interest, that section, College or Faculty should have representation on the British Medical Association negotiating body. The General Secretary reported that he had communicated in those terms with the various Colleges and other bodies concerned, and that the replies received so far had been satisfactory.

The General Secretary also reported that suitable communications had been sent in terms of the resolution of the Federal Council at its meeting in August, 1957, expressing its appreciation of the agreement by the Royal Australasian College of Surgeons and The Royal Australasian College of Physicians that approaches to the Government on medico-political matters should be made through the Federal Council of the British Medical Association, but the Colleges always reserving the right of independent approach should this, in the opinion of the Council of the College, become necessary.

A letter was received from the New South Wales Branch, forwarding a copy of a resolution passed by the Annual Meeting of Delegates of Local Associations and subsequently supported by the Branch Council, in which the delegates expressed the opinion that the Federal Council should be the only negotiating body of the profession with the Government on any national health service.

A letter was received from the Western Australian Branch, in which it was recommended that, in order to consolidate the profession in Australia, the Federal Council be requested to take steps to modify the composition of the Federal Council, so as to provide representation from Branches and Royal Colleges and Faculties in Australia. The matter was referred to the Branches, and the majority were not in favour of the proposal. The Western Australian delegates moved in terms of their Branch letter, but after discussion their motion was lost. Further discussion then took place in the light of a letter from the New South Wales Branch, and it was resolved that, whenever necessary or desirable, an invitation be extended to the various Colleges and associations to nominate representatives who might be coopted to a committee of the Federal Council to consider matters involving the interests of the College or association concerned.

PUBLIC RELATIONS.

Canberra Information Services.

At its meeting in August, 1957, the Federal Council had decided to subscribe to the Canberra Information Services for one year. The General Secretary reported that subsequently it had been advised that the cost of the service would be considerably greater than that originally quoted. After discussion, the Federal Council decided that a new agreement should be entered into with the Canberra Information Services for one year from March 1, 1958, at the rate of four guineas per week.

"Code of Cooperation."

The General Secretary reported that he had received from the Canadian Medical Association a brochure regarding "Code of Cooperation", which was the basis of cooperation between organized medicine and individual physicians on the one hand, and the Press, radio and television on the other, in Canada.

SPECIAL GROUPS.

The Dermatological Association of Australia (B.M.A.).

Peter MacCallum Clinic.

The General Secretary referred to a letter received from the Dermatological Association of Australia (B.M.A.),

requesting an expression of opinion from the Federal Council on certain facets of the operations of the Peter MacCallum Clinic in Melbourne. After discussion it was decided to advise the Dermatological Association of Australia (B.M.A.) that the matter was under consideration by the Victorian Branch of the British Medical Association.

The General Secretary also reported that he had received a list of office-bearers for the Dermatological Association of Australia (B.M.A.) for 1957-1958.

Special Group on Aviation Medicine.

The General Secretary reported that he had received the annual report for 1956-1957 of the Special Group on Aviation Medicine.

Australian Rheumatism Association (B.M.A.).

The General Secretary reported that he had received a report on the activities of the Australian Rheumatism Association (B.M.A.).

The Ophthalmological Society of Australia (B.M.A.).

The General Secretary reported that he had engaged in correspondence with the Ophthalmological Society of Australia (B.M.A.) in relation to the redrafting of the rules of the Society.

COLLEGE OF GENERAL PRACTITIONERS.

At its meeting in August, 1957, the Federal Council agreed to sponsor a conference of representatives of the Royal Australian College of Surgeons, the Australian Post-Graduate Federation in Medicine and the College of General Practitioners, to discuss surgical training of general practitioners. The President reported that the conference had been held, and a useful discussion had taken place on the means whereby training could be provided for general practitioners in the performance of essential surgery. A number of resolutions had been adopted, and those had been referred back to the bodies represented at the conference. The report of the conference was received.

The General Secretary reported that he had received a letter from the College of General Practitioners, relating to the carrying out of a general practice survey, and requesting the assistance of the British Medical Association. It was resolved that in the event of the Federal Council being asked to nominate a representative to the steering committee, Dr. L. R. Mallen be nominated.

MEDICAL ETHICS.

Advertising by Members in Monthly Bulletins.

A letter was received from the South Australian Branch seeking views on the advisability of permitting members commencing or resuming practice or changing address to advise their colleagues of this through the medium of the monthly notices. The matter was referred to the Branches, the majority of which raised no objection to the procedure suggested, and after discussion the Federal Council resolved that it saw no objection to permitting members commencing or resuming practice or changing address to advise their colleagues of this through the monthly notices.

Propriety of Medical Practitioners Consulting with Non-Medical Persons.

At its meeting in August, 1957, the Federal Council decided to sponsor a meeting between itself and the councils of the College of Radiologists and the College of Pathologists, to consider the propriety of medical practitioners consulting with non-medical persons. The General Secretary reported that as the matter was not one affecting radiologists, a meeting had been held with representatives of the Australian College of Pathologists. At the conference it was stated that the College of Pathologists was very concerned about the activities of lay persons, technicians and science graduates practising as pathologists, and not under the supervision of fully qualified pathologists. It was stated that the fact that they were practising and continuing to practise was due to two causes: (i) members of the profession sent patients to them; (ii) the persons who were sent to them were able to obtain rebates if they were members of medical benefits funds. The College had asked that members of the profession be asked not to send their patients to lay pathologists, and that the matter of payment of rebates to patients sent to lay pathologists be taken up with the Minister for Health. After discussion it was resolved

that the Federal Council should request Branch Councils to inform members of the implications involved in referring work to unregistered practitioners. It was further resolved that the Federal Council should take up with the Minister for Health the question of the payment of a benefit to a patient who received services from an unregistered person not employed by a legally qualified medical practitioner.

Shares in Ethical Companies.

A letter was received from the South Australian Branch, requesting a ruling by the Federal Council on the subject of the holding of shares by members of the Association in firms which supplied drugs and various items of medical equipment. During the subsequent discussion, reference was made to a motion relating to this matter which had recently been passed at a meeting of the Victorian Branch, and in the light of this the Federal Council decided that it was of the opinion that it was unethical for a member of the British Medical Association directly or indirectly to apply for or to acquire or retain, whether in his own name or in that of his nominee, any stock, shares or other interest in any company engaged in the sale of drugs, medicines or medical or surgical appliances (hereinafter referred to as the vending company) or in any other company which to the knowledge of such member held shares in the vending company where it was directly or indirectly a term, condition, agreement or understanding attaching to the acquisition or ownership of such stock, shares or other interest that the member would prescribe the products of the vending company or otherwise promote the sale of such products.

AUSTRALIAN POST-GRADUATE FEDERATION IN MEDICINE.

The General Secretary referred to the receipt of copies of the minutes of meetings of the executive committee and also of the general meeting of the Australian Post-Graduate Federation in Medicine, as well as a report of the Federation for the year 1956-1957.

BRITISH MEDICAL ASSOCIATION.

At its meeting in August, 1957, the Federal Council resolved that the Secretary-Treasurer of the Fifth British Commonwealth Medical Conference should be advised that the Federal Council was agreeable to the holding of the conference in Edinburgh in 1959. The General Secretary reported that a letter of thanks had been received from the Secretary-Treasurer, in which it was stated that, as only three of the ten member associations represented in the conference had expressed a preference for the year 1958, and in view of other considerations, the Council of the British Medical Association had decided to postpone the conference to July, 1959.

Commonwealth Medical Advisory Bureau.

The General Secretary reported the receipt of a notice of the retirement of the medical director of the Commonwealth Medical Advisory Bureau, Brigadier H. A. Sandiford, and the appointment of Dr. R. A. Pallister to the position.

Annual Meeting of the Association.

The General Secretary reported the receipt of advice that the annual meeting of the British Medical Association would be held in Birmingham from July 10 to 14, 1958.

Appointments to Friendly Society Lodges.

The General Secretary referred to some correspondence that he had received from the London office of the British Medical Association, inquiring as to the present attitude of the Branches in Australia regarding medical practitioners accepting appointments to friendly society lodges. He said that the matter had been referred to the Branches, which had advised that in most States there were now no appointments as medical officers to friendly society lodges, although in a few mining areas medical services were still provided on a capitation system. In Queensland there were still a few such appointments, although it was the policy of the Branch Council that a lay body must not make a profit from the employment of a doctor, and no member of the British Medical Association might accept a salaried appointment with a friendly society lodge. The General Secretary said that the information had been passed on to the London office.

Post-Graduate Medicine.

The General Secretary reported that he had received from the Commonwealth Medical Advisory Bureau a copy of the

summary of regulations for post-graduate diplomas and of courses of instruction. A copy of this publication had been sent to each of the Branches.

"World Medical Periodicals."

The General Secretary reported the receipt of advice from the *British Medical Journal* of the recent publication of the second edition of "World Medical Periodicals". It contained a comprehensive list of the medical journals published throughout the world, and an international list of abbreviations of journal names.

Medical Registration in New Zealand.

The General Secretary reported the receipt from the British Medical Association in London of copies of extracts from a letter received from the New Zealand Branch, giving details of the latest regulations on medical registration in New Zealand. Copies of this information had been passed on to the Branches.

NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL.

The General Secretary reported the receipt from Dr. W. F. Simmons, the representative of the Federal Council on the National Health and Medical Research Council, of copies of the official report on the forty-third session of the Council held in May, 1957, and of Dr. Simmons's own report of the forty-fourth session held in November, 1957. Dr. Simmons spoke briefly to the reports, and the President thanked him for his report and for his work in representing the Association on the National Health and Medical Research Council.

COMMONWEALTH HEALTH DEPARTMENT.

Drug Addiction.

The General Secretary referred to a communication from the World Health Organization, relating to the Federal Council's interest in the problem of drug addiction. The World Health Organization had also forwarded copies of the fifth and seventh reports of the Expert committee on addiction-producing drugs, and requested information on future activities of the Federal Council in dealing with the problem in Australia. The General Secretary reported that he had replied to the letter from the World Health Organization, and had advised them of the report of a committee of the Federal Council on pethidine, and of the fact that the Commonwealth Government, acting on the recommendation of the Federal Council, had removed pethidine in tablet form from the list of pharmaceutical benefits.

Statistical Bulletins from the Department of Immigration.

The General Secretary reported that he had received from the Director-General of Health copies of statistical bulletins of the Department of Immigration for the quarters ending July and October, 1957, and January, 1958.

Report of the Director-General of Health.

The General Secretary also reported that he had received a copy of the report of the Commonwealth Director-General of Health for the period 1954 to 1956.

WORLD MEDICAL ASSOCIATION.

Eleventh General Assembly.

The General Secretary referred to the receipt of the report by Dr. L. R. Mallen of the thirtieth and thirty-first council sessions and the eleventh general assembly of the World Medical Association, held in Istanbul, Turkey, from September 29 to October 5, 1957, and also to the receipt from the Secretary-General of the World Medical Association of a copy of the minutes of the eleventh general assembly.

A letter was received from the New Zealand Branch of the British Medical Association, authorizing an Australian delegate to represent the Branch at the eleventh general assembly.

Dr. Naomi Wing wrote, requesting that her appreciation be conveyed to the members of Council for their action in choosing her as one of the official delegates to the eleventh general assembly.

Thirty-Fifth Council Meeting.

At the meeting of the Federal Council in August, 1957, it was resolved that a letter of appeal for subscriptions towards the expenses of the thirty-fifth council meeting of

the World Medical Association, to be held in Sydney in April, 1958, should be forwarded to members under the signature of the President. The General Secretary reported that this had been done, and so far the response had been satisfactory. The Federal Council resolved that the New South Wales representatives on the Federal Council should be appointed a committee to organize the thirty-fifth council meeting of the World Medical Association.

Secretary-General's Newsletters.

The General Secretary reported receipt of six of the Secretary-General's newsletters numbering from 40 to 45. Copies had been sent to the Branches and to the members of the Federal Council.

Supporting Committee.

The General Secretary referred to two letters from the Secretary-General of the World Medical Association, in which the appreciation of the Council of the World Medical Association and of the Eleventh General Assembly was expressed for the generous financial support and continuous enthusiastic interest on the part of the British Medical Association in Australia in the work of the World Medical Association.

A letter was received from the Secretary-General of the World Medical Association, referring to the need for the appointment of a Deputy Secretary-General, and asking if the supporting committee would be willing for some of its funds to be used towards the salary of the new appointee. Dr. L. R. Mallen spoke of the importance of the making of a suitable appointment to this position, and the Federal Council resolved to inform the World Medical Association that it was prepared to make a contribution towards the salary of a Deputy Secretary-General from its supporting committee funds.

Annual Subscription.

The Federal Council approved the action of the Honorary Treasurer in paying the 1958 annual subscription to the World Medical Association at the rate of one Swiss franc per member as at January 1, 1958.

Medical Education.

The General Secretary referred to a letter that he had received from the Secretary-General, forwarding a copy of the provisional programme for the Second World Conference on Medical Education, to be held in Chicago from August 30 to September 4, 1959. The letter asked for the names of suitable speakers who would be prepared to speak on the topics enumerated in the programme. The General Secretary reported that the matter had been referred to the Australian Post-Graduate Federation in Medicine and to the Branches, and certain names had been put forward.

The Federal Council, in response to a further letter from the Secretary-General, authorized the Honorary Treasurer to contribute the sum of £250 towards the cost of the conference.

Secretary for Australasia and Correspondent to the "World Medical Journal".

The General Secretary then referred to letters from the Secretary-General relating to his reelection at the thirty-first council session as the Secretary for Australasia for 1957-1958, and also to his appointment as a correspondent of the *World Medical Journal*.

Publications.

The General Secretary referred to the receipt from the Secretary-General of copies of a paper entitled "Swedish Doctors at Their Work", the history of the first decade of the World Medical Association, and three papers relating to the utilization of hospitals in Canada and the United States, in the Philippines and in Switzerland. He also referred to the receipt of the final report of the World Health Organization on the role of the hospital in the public health programme.

Social Security System.

The completion of a comprehensive *questionnaire* on social security systems forwarded by the Secretary-General was left in the hands of the General Secretary, as was the completion of *questionnaires* on national society security schemes and on pharmaceutical costs.

Twelfth General Assembly.

Thirty-Second Session of Council and Twelfth General Assembly.

The General Secretary referred to a notice that the thirty-second session of Council of the World Medical Association would be held in Paris in May, 1958, and the twelfth general assembly would be held in Copenhagen in August, 1958. He said that the Branches had been asked to submit any items of business that they wished to have brought forward.

The Federal Council resolved that Dr. Melville E. Chinner should be appointed a delegate to the twelfth general assembly, and that Dr. Betty Bright should be appointed an alternate delegate or observer. The appointment of other observers was left in the hands of the President and General Secretary.

REPATRIATION DEPARTMENT.

Medical Benefits for Widows, Widowed Mothers and Orphans of Deceased Ex-Servicemen.

At its meeting in Adelaide in August, 1957, the Federal Council resolved to make further representations to the Repatriation Department to obtain increases in the fees payable to local medical officers. At the same time the Council decided to ask the Department to terminate the agreement for the payment on a per-capita basis of medical practitioners rendering medical services for war widows, widowed mothers and orphans of ex-servicemen, the latter approach to be deferred till after the Department had replied to the representations regarding local medical officers' fees, provided that a reply was received from the Department within three months. The General Secretary reported that in September the Chairman of the Repatriation Commission had advised that the Council's representations regarding local medical officers' fees would be investigated. A further letter in December, 1957, had stated that the matter was still being investigated, and a communication would be forwarded to the Federal Council as soon as possible. In view of those replies, action to have terminated the agreement for services to war widows and other dependants had been deferred. Subsequently a letter was received from the New South Wales Branch, submitting a resolution accepted by the delegates at the annual meeting of delegates of local associations with Council, and subsequently approved by the New South Wales Branch Council. In this the view was expressed that sufficient time had elapsed in negotiations between the Federal Council and the Repatriation Department on the question of war widows, and it was recommended that the Federal Council should withdraw forthwith from its agreement with the Repatriation Department.

It was moved by Dr. A. J. Murray that notice of termination of the agreement with the Repatriation Department for the provision of medical services to widows, widowed mothers and orphans of deceased ex-servicemen be given to the Repatriation Department with effect from a date to be determined; but after a lengthy discussion the Federal Council resolved to adjourn the debate on the motion until the next meeting.

After further discussion, Dr. T. G. Swinburne gave notice of motion that he would move at the next meeting of the Federal Council that the following motion, which was passed at the meeting on August 30, 1957, be rescinded:

That the Repatriation Department be asked to terminate the agreement for the payment on a per-capita basis of medical practitioners providing medical services to war widows and their dependants and requested to substitute in lieu thereof a fee-for-service method of payment.

The Federal Council also resolved that the Branches should be asked whether, in the event of the present capitation system for the payment of medical services to widows, widowed mothers and orphans of deceased ex-servicemen being terminated, and in the event of failure to obtain an increase in the present rate of 12s. 6d. per service to local medical officers, they would be agreeable to the Federal Council entering into an agreement with the Repatriation Department for a fee-for-service arrangement for the care of widows, widowed mothers and orphans of deceased ex-servicemen at the rate of 12s. 6d.

Local Medical Officers.

At the meeting of the Council held in August, 1957, the General Secretary was instructed to advise the Chairman of the Repatriation Commission that the Federal Council's

decisions on the voucher system for payment of local medical officers and the "conditions of appointment" of local medical officers put forward by the Commission had been necessarily deferred pending consideration of the subject by Branch Councils. The General Secretary referred to the comments of the Branches on the subject, and in particular to a communication from the Queensland Branch, advising that it had approved of the Repatriation Commission's proposal to introduce a voucher system, and submitting a recommended format for a suitable voucher. However, after further discussion the Federal Council expressed its disapproval of the voucher system proposed by the Repatriation Department, and also of the suggested terms of appointment of local medical officers. The view was expressed that a conference would probably produce a more acceptable document, and the President was requested to confer on the matter with the Principal Medical Officer of the Repatriation Department.

Forms KK, MF90 (Revised) 1957 and MPB230.

The General Secretary reported that the Federal Council's requests with regard to fees for the completion of Forms KK, MF90 (revised) 1957 and MPB230 were still under consideration.

Conditions of Service of Visiting Medical Officers.

At its meeting in August, 1957, the Federal Council resolved that a further approach should be made to the Minister for Repatriation in regard to certain matters referred to the Federal Council by the Royal Australasian College of Surgeons and The Royal Australasian College of Physicians relating to the conditions of service of visiting medical officers at Repatriation Department hospitals. The President of the Federal Council was empowered to join with a representative of each of the two Colleges concerned to any conference with the Minister for Repatriation. The President reported that the matter had been discussed with the two Colleges concerned, and with the Minister for Repatriation, but that the conference had not yet been held.

DEPARTMENT OF SOCIAL SERVICES.

Report of Director-General.

The General Secretary referred to the receipt of the sixteenth report of the Director-General of Social Services for the year ended June 30, 1957.

Fees.

As the result of resolutions at the meetings of the Council in August, 1956, and August, 1957, representations were made to the Department of Social Services with regard to the fees to be paid for the examination of pensioners, psychiatrists' fees for consultation and report on invalid pensioners and fees paid to general practitioners by the Department of Social Services. The General Secretary reported that in each case the matter was still under consideration.

Rehabilitation.

At its meeting in August, 1957, the Federal Council resolved to draw the attention of the Commonwealth and State authorities and voluntary agencies to the fact that it regarded integration and coordination of rehabilitation services within each State as essential to progress in making rehabilitation treatment available to persons who needed such services, and that State Branches be asked to investigate the possibility of sponsoring conferences at a State level to discuss such integration and coordination. Reference to the motion was included in the report of the meeting, which appeared in THE MEDICAL JOURNAL OF AUSTRALIA on October 5, 1957, and as a result of having seen that report Mr. F. H. Rowe, the Director-General of Social Services, wrote to the General Secretary. In his letter he said that he was in complete agreement on the need for the closest possible degree of collaboration and cooperation between statutory and non-statutory bodies providing complete or partial rehabilitation services in Australia. His department was responsible for the administration of the Commonwealth Rehabilitation Service, and to assist in that work the Minister some two years previously had agreed to establish at central level the Commonwealth Rehabilitation Advisory Committee, for the purpose of ensuring that plans for the development of the service would be made in collaboration with other services in the community. Dr. Selwyn G. Nelson, of Sydney, and Dr. Douglas Galbraith, of Melbourne, were the representatives of the British Medical Association. Also

on the committee were Sir Kenneth Coles, representing employers of Australia, Mr. A. E. Monk, President of the Australian Council of Trade Unions, and Miss Joan Tuxen, of Melbourne, representing voluntary welfare agencies; officers of the Department of Social Services and of the Department of Labour and National Service also attended. Mr. Rowe said that the next meeting of the committee was expected to take place in March, 1958, and he thought that it might be desirable for the Association to draw the attention of Dr. Nelson and Dr. Galbraith to the matter. He went on to say that the establishment of similar committees at State level was not at present contemplated. Until knowledge and appreciation of rehabilitation in all States became wider, it had seemed wiser to develop working policies at a central level, rather than risk the real possibility of separate plans being developed in the various States. At the same time, his department would welcome closer liaison with local Branches of the British Medical Association on rehabilitation matters, and if it was agreeable to the Association, it would be a simple matter for him to arrange for regular discussions between a representative of the Association and rehabilitation officers in the various States. For some years there had been a standing departmental committee in existence in each State to ensure teamwork within the department, and there might be value in inviting a local representative of the British Medical Association to the meetings from time to time to discuss matters which might be causing the Association concern, or in respect of which improvements might be effected. In conclusion, Mr. Rowe said that if the Association agreed to his suggestion, he would be glad to make early arrangements for the State directors to make the necessary approach to local Branches of the British Medical Association. After discussion, the Federal Council resolved to accept the proposal in the letter of the Director-General of Social Services to invite a representative of each Branch to attend meetings of the Standing Departmental Rehabilitation Committee.

Another matter discussed at the meeting of the Federal Council in August, 1957, related to the employment of rehabilitated persons in Commonwealth departments, and the Federal Council recorded the view that the most difficult problem facing handicapped persons was placement in suitable employment, either within the civil service or in industry, and that the Federal Council should approach the Minister for Labour and National Service regarding the problem. As a result of that decision, the General Secretary made an approach to the Director-General of Social Services and received a reply from the Acting Director-General, Mr. A. W. Paul. Mr. Paul said that his department had a special interest in the employment of the disabled, because of its responsibility for the administration of the Commonwealth Rehabilitation Service. As a result, the Department had carried out an active public relations programme aimed at educating the community, and employers particularly, as to the economic soundness and social desirability of fitting disabled persons with employment and securing for them suitable work within their capabilities. Much remained to be done, but a good deal of success had been achieved. The Department of Labour and National Service had also carried out public relations work with employers. Mr. Paul said that it was realized that the Public Service, both Commonwealth and State, presented a useful field for the employment of many disabled persons, because of the sedentary nature of the work offering. That had been appreciated by the Commonwealth Public Service Board, which early in 1956 had drawn the attention of all departments to the fact that greater use could be made of handicapped persons for temporary employment, and requested that departments indicate what positions could be filled by physically handicapped people when lodging staff requisitions. Mr. Paul said that a considerable number of physically handicapped persons were in employment in the Public Service, many having been placed after treatment and training provided by the Commonwealth Rehabilitation Service. However, the question of permanent entry to the Public Service was somewhat different, as it involved considerations of medical standards for superannuation fund or provident fund purposes. That matter did not come under the control of individual departments, but was one for consideration by the Public Service Board, as it affected the service as a whole. It was suggested therefore that any representations from the Federal Council might more appropriately be directed to the chairman of the Public Service Board or to the Prime Minister, under whose ministerial jurisdiction the Board functioned.

The General Secretary also referred to replies that had been received from the Branches on reference to them of

the matters discussed at the Federal Council meeting in August, 1957. The Queensland Branch had reported that the Council had convened a meeting with selected medical practitioners interested in rehabilitation services in Queensland. As a result, the Council had resolved to make an approach to the State Minister for Health, with a view to the Government's establishing a rehabilitation service in Queensland. It was also resolved to recommend that the Federal Council should approach the Commonwealth Minister for Health, with a view to the Federal Government's making financial grants to the States for the furtherance of rehabilitation services. In a further letter the Queensland Branch Council stated that if the British Medical Association was to play an important part in promoting adequate rehabilitation services in Australia, the first step should be an educational one, to teach hospital and health authorities that a department of physical medicine and rehabilitation was an essential part of all large hospitals, and that the present Australian problem was not the extension of the existing facilities of the Department of Social Services or of various voluntary bodies, but the attachment of properly staffed departments to the large hospitals. That would involve contacts on the State level with hospital boards and administrations and with State health departments. Once that general principle was accepted, the Federal Council should arrange to bring to Australia one British and one American expert for discussions and visits to hospitals. The finance for such a visit might be obtained from one of the large philanthropic organizations. On the basis of the report, the Federal Council should approach the Federal Government and advise it to make grants towards rehabilitation in a similar way to those made for tuberculosis. The Federal Government should also be asked to appoint an expert committee on the lines of the University Grants Committee, to determine the extent of the finance that would be needed. If funds were made available, full-time directors of physical medicine and rehabilitation would need to be appointed by the major hospitals. Once departments were established, the problems of integration and coordination would be automatically solved. The Victorian Branch had recommended that the Federal Council should urge the Commonwealth to supply more money to the State Department of Social Services, to carry on and extend its rehabilitation activities, particularly as the results so far achieved made it obvious that the work that had been done to "salvage" invalid pensioners and to restore sufferers from industrial and other injuries to employment had already saved the country immense sums of money.

The General Secretary also read a report by Dr. Selwyn Nelson of a meeting of the Commonwealth Rehabilitation Advisory Committee held in November, 1957. The main activities at the meeting were firstly a review of the present position of rehabilitation at the various centres, with presentation of some statistics, and secondly, a discussion of the forthcoming Pan-Pacific Conference on Rehabilitation, to be held in Sydney in November, 1958. Dr. Nelson's letter stated that he and Dr. Galbraith had stressed the importance of properly equipped rehabilitation centres in hospitals as part of the over-all planning of the Commonwealth. The difficulties that lay in the way were (i) the lack of interest of certain State Cabinets and Commonwealth departments, and (ii) the difficulty of negotiating Commonwealth aid when the Commonwealth section was under the control of the Department of Social Services, and the State hospitals under the control of the Health Department. Dr. Nelson said that there was evidence of some sympathy with the problem, but no definite progress had yet been made.

In a general discussion on the problem of rehabilitation, Dr. Alan Lee referred to the possibilities of rehabilitation and the unsatisfactory features of the present set-up. He said that the Queensland Branch wanted to make hospital controllers appreciate the situation. With regard to the important aspect of finance, the Queensland Branch considered that the Federal Council should take the initiative and approach the Commonwealth Government with regard to, for example, grants-in-aid. The Federal Council resolved, on the motion of Dr. C. W. Anderson, to approach the Prime Minister with the request that he should receive a deputation regarding the financing and development of rehabilitation services within the Commonwealth. In supporting the resolution, Dr. W. F. Simmons emphasized the fact that rehabilitation was a health matter, rather than one of social services, as it should start from the day the patient entered hospital. He said that it was important for the British Medical Association to make this contribution to the development of an important matter. The Federal Council further resolved that Dr. C. W. Anderson, Dr. A. E.

Lee and the General Secretary should be asked to prepare the material for submission to the Prime Minister, and that the personnel of the deputation to meet the Prime Minister should be the President, Dr. H. C. Colville, Dr. C. W. Anderson, Dr. A. E. Lee and the General Secretary.

The General Secretary referred to a report prepared by Dr. Naomi Wing on rehabilitation and placement in industry of the physically handicapped. The report had been circulated to the Branches and to members of the Federal Council, and the Federal Council resolved to thank Dr. Wing for the report.

A discussion then took place on a recommendation received from the New South Wales Branch relating to the regular review of invalid pensioners. In submitting the recommendation, the Branch had stated that it seemed to be the general consensus of opinion of the delegates of the Local Associations of the Branch that there were a number of persons who at some time or other had been granted invalid pensions, but in the opinion of their medical practitioners would be capable of undertaking work of some nature. In the discussion, the opinion was expressed that the recommendations of the New South Wales Branch were largely covered by existing provisions. However, the Federal Council finally stated that it was of the opinion that an attempt should be made to reduce the number of invalid pensioners by the following means: (a) regular annual review of a specially employed medical officer, interviewing and examining pensioners in collaboration with local medical officers; (b) improved rehabilitation services to enable training and suitable employment of invalid pensioners where indicated.

AUSTRALIAN SOCIAL WELFARE COUNCIL.

The General Secretary read a letter of thanks from the Australian Social Welfare Council for the contribution that the Federal Council had made to its funds in the way of an annual subscription of £100.

A letter was also read from the Australian Social Welfare Council, in which it advised that the Ninth International Conference of Social Work would be held in Tokio, Japan, from November 30 to December 6, 1958. The theme of the conference would be "Mobilizing Resources for Social Needs: Social Needs and Resources for Meeting Them". The General Secretary said that the matter had been referred to the Branches, so that they might advise their members of the conference and of the fact that further information on registration, accommodation and travel was available from the office of the Federal Council.

SHIPS' SURGEONS.

The General Secretary read a letter from the Australasian Steamship Owners' Federation in relation to their decision that the present salary of £1000 per annum for ships' surgeons was adequate. The letter pointed out that, in addition to having all medical equipment, medicines, drugs etc. supplied, ships' surgeons were provided with first-class accommodation, which was the equivalent of that available at a first-class hotel. Ships' surgeons were permitted to make a charge of 15s. per visit for first-class passengers and 12s. 6d. for a visit for second-class passengers. The Federation was not aware of their earnings from that source, but considered that if they were not high, it would indicate that the surgeons enjoyed a very substantial amount of leisure time, as the hours at which they were available for consultation in the surgery were short and generally confined to morning and afternoon at sea and once a day in port in the evening. If surgeons accepted appointment on a more or less permanent basis, they received approximately one month's leave each year. The Federation's letter concluded that an amicable relationship existed between the shipping companies and the surgeons they employed from time to time, the usual basis seeming to be that members of the medical profession were pleased to accept engagement for varying terms which suited their convenience.

MEDICAL SERVICES OF THE ARMED FORCES.

The General Secretary referred to a letter received from the Minister for Defence relating to discussions carried on some time previously with a deputation from the Federal Council, particularly relating to the shortage of doctors in the armed forces. In the letter the Minister stated that he was pleased to be able to inform the Federal Council that it had been agreed in principle that the joint use of Service hospitals in Australia should be extended. There were

certain difficulties, and detailed plans designed to overcome the difficulties were under consideration. On the matter of the setting up of a Services Medical Advisory Committee, the Minister referred to the existence of the Services Medical Committee, comprising the Directors-General of Medical Services in the three Services, and suggested that a distinguished representative of the medical profession might be appointed as a member of the committee. Other matters raised by the deputation had been referred to the Service departments concerned, and a summary of the replies of the heads of the Service were attached. In a subsequent letter, the Minister advised that Professor S. Sunderland, Dean of the Faculty of Medicine in the University of Melbourne, had accepted the appointment to the Medical Services Committee. In subsequent discussion the opinion was expressed that something had been achieved, but there was still a great deal to be done. The Federal Council resolved to request the Minister for Defence for information as to when the joint use of Services hospitals, to which he had agreed in principle in his letter, which was dated August 28, 1957, was to be implemented.

FUND FOR PUBLICATION OF MEDICAL MONOGRAPHS.

The General Secretary read a letter from Dr. Bryan Gandevia, expressing his appreciation of the manner in which his monograph entitled "An Annotated Bibliography of the History of Medicine in Australia" had been published. A letter had also been received from the librarian of the Commonwealth National Library, Canberra, inviting the Federal Council to present a copy of Dr. Gandevia's monograph to the National Library, and that had been done.

The General Secretary referred to two other manuscripts that had been under discussion with a view to their publication by the Monograph Fund, but no action had been taken in that direction.

The Honorary Treasurer, Dr. W. F. Simmons, presented the financial statement for the Medical Monograph Fund. This showed a total of £2062 standing to the credit of the fund. The printing and binding of the first monograph had cost just over £500, and sales so far had brought in £30.

PAN-PACIFIC REHABILITATION CONFERENCE.

The General Secretary referred to notice that had been received of the Pan-Pacific Rehabilitation Conference organized by the International Society for the Welfare of Cripples, to be held in Sydney in November, 1958. The support of the Federal Council had been invited. Reference was also made to a letter addressed to the President from the chairman of the Medical Committee, Dr. Selwyn Nelson, inviting suggestions for subject matter for the programme of the conference. The matter had been referred to the Branches. The General Secretary listed a number of prominent overseas representatives who would be attending the conference.

DEPARTMENT OF LABOUR AND NATIONAL SERVICE.

The General Secretary reported that he had received from the Department of Labour and National Service copies of the "Booklet of Instructions for National Service Medical Examinations", the text of which had been revised substantially by the medical directors-general of the three Services.

GENEVA CONVENTION ACT, 1957.

The General Secretary also referred to the fact that the Government of the Commonwealth of Australia had given its assent to the Geneva Convention in the *Geneva Convention Act*, assented to on December 18, 1957.

DATE AND PLACE OF NEXT MEETING.

It was resolved that the date and place of the next meeting should be left in the hands of the President.

VOTES OF THANKS.

The thanks of the meeting were extended to the President, Dr. H. C. Colville, for presiding, and to Dr. J. G. Hunter, Dr. A. McNeil and Miss H. Cameron for their services during the meeting.

The thanks of the Federal Council were also extended to the Tasmanian Branch for its hospitality.

Out of the Past.

In this column will be published from time to time extracts, taken from medical journals, newspapers, official and historical records, diaries and so on, dealing with events connected with the early medical history of Australia.

THE CHILDREN'S HOSPITAL, SYDNEY.

[From the *Australasian Medical Gazette*, July, 1898.]

A SUBJECT of some interest to the profession, but of vital importance to people possessing children in the city and suburbs of Sydney, is the question relating to the addition of a "Diphtheria ward" to the Children's Hospital established many years ago at the Glebe. It is of infinitely the most moment to the poorer members of the community who never possess adequate means for the successful treatment of this dread disease. No more fitting place could have been chosen for such additional accommodation, yet the local people, especially some of those who believe, under what appears to be a delusion, that they are the elite, have met in public meeting to protest against its erection on the ground of their belief that thereby extra danger of contracting the disease would be incurred by themselves. Any movement more inherently selfish it is impossible to conceive. Even were the protest made against the initiation of an institution for the reception of cases of this disease it would be without decent excuse; but when, as in the present instance, it is made against the provision of better space for the reception of cases which have been for some years treated in what has been found to be deficient accommodation, it becomes positively contemptible in its reckless disregard of the good of everyone but themselves. A well managed ward for the treatment of this disease is less likely to be a focus of infection than a single case in a private house retained there because there is no provision made for its treatment under hospital conditions. The meeting has not been without its usefulness because it shows in all its ghastliness the selfishness of the people composing it, and the utter disregard of the well-being of the helpless which was exhibited by many interesting specimens of the self-righteous pseudo-great ones. Happily, however, the project has not been blighted by the puny effort. The ward is built, and poor children infected by the fell disease will in many cases have their chances of recovery infinitely increased, whilst the embroilment bids fair to act usefully by ridding the institution of members of its governing body who have been for years, when occasion happened, detrimental to its peaceful progress.

Correspondence.

PELVIC EXENTERATION.

SIR: I do not wish to enter into the merits or demerits of pelvic exenteration, but I think several points in Mr. J. C. Loxton's recent article require an answer.

He states in relation to radiotherapy in advanced cases of carcinoma of the cervix that there are "less than 5% of five-year survivors". This is not so. Hayman's League of Nations reports of "Ten Best Centres" show a 25% five-year survival for Stage III and IV cases of carcinoma of the cervix with a total number of 2678 cases. The Christie Hospital (Manchester, 1946) figures show 29% five-year survival for Stage III and IV cases (690 cases in all). And it should be emphasized that there is no selection of cases for radiation therapy.

With "minimal selection" the results of pelvic exenteration for 501 cases show 19% five-year survival with a surgical mortality of 18%. It would appear that these figures are for "pelvic cancer" and not wholly carcinoma of the cervix, as this group up to January, 1955, as Mr. Loxton points out, consisted of 441 exenterations, of which only 336 were for carcinomas of the cervix.

Thus, apart from selection of cases, which acts very appreciably in improving the survival rate, so may the factor of the inclusion of other cases of pelvic cancer also improve the surgical figures. Thus, though the figures are not strictly comparable, it would still appear that radiation

therapy offers a greater chance of five-year survival than surgery. In conclusion, I should like to agree with Mr. Loxton's statement that "radiotherapy is particularly disappointing in the case of recurrent cancer following previous irradiation". I think it is in such cases, and where radio-resistance has been proven, that pelvic exenteration has most to offer.

Yours, etc.,

PHILIP CORLETT.

135 Macquarie Street,
Sydney,
March 25, 1958.

Obituary.

WILFRED EVANS.

DR. W. J. McCRISTAL writes: With the changing pattern of the doctor-patient relationship, altered spiritual values and personal dignity at stake, there ended, with the passing of Wilfred ("Bill") Evans, another of a species that might be nigh to becoming extinct. Wilfred had gravitated from general to consultant practice in an era that allowed time for the humanities; he could practise medicine for the joy and fun of it, his living being incidental. Wilfred had a lively faith and an inquiring mind in medicine and was at his best during a scientific congress. Though his main interest and affection was cardiology, he was nevertheless the well-informed and down to earth physician. At the Heart Congress at Washington he was in a constant state of euphoria, and though unobtrusive, even somewhat shy, his company was at a premium both socially and for the stimulus and enthusiasm it engendered. Through his lack of guile, absence of self-motive, ethical sense and clinical integrity he was held in affection by his own profession; as the "complete" physician his public idolized him; to his family he gave his all unstintedly and devotedly; his country in peace and in war he served selflessly and with distinction.

GEORGE CROSS LOVE.

DR. W. H. WARD writes: It was with great sadness that I saw the death of Dr. George Love recorded in your columns. I had known his father, the late Dr. Joseph Love, during his long service to the Alfred Hospital, and it was with pleasure that I found myself serving with George Love in a militia field ambulance during 1939. We then served together in a field ambulance in the Middle East, and during that period I conceived a great admiration for his sterling character. He was by nature rather quiet and reserved, but his kindness and cheerfulness, even over the most adverse circumstances, were such as to endear him to every man in the unit. He was an accomplished musician as a flautist, and his ability to entertain with a cheap tin whistle was a great asset to the unit. His death will be mourned by all those who served with him.

Post-Graduate Work.

THE POST-GRADUATE COMMITTEE IN MEDICINE IN THE UNIVERSITY OF SYDNEY.

POST-GRADUATE CONFERENCE AT ALBURY.

THE Post-Graduate Committee in Medicine in the University of Sydney, in conjunction with the Melbourne Medical Post-Graduate Committee and the Border Medical Association, will hold a post-graduate conference at the Albury Base Hospital on Saturday and Sunday, April 19 and 20, 1958. The programme is as follows:

Saturday, April 19: 2.30 p.m., "Surgery of the Anus and Rectum", Mr. E. S. R. Hughes; 4 p.m., "Aetiology and Treatment of Coronary Disease", Professor J. G. Hayden; 5 p.m., "Backache", Mr. J. B. Cloke.

Sunday, April 20: 10 a.m., "Ulcerative Colitis", Mr. E. S. R. Hughes; 11 a.m., quiz session (speakers, Professor Hayden, Mr. Hughes and Mr. Cloke).

Arrangements have been made by the Melbourne Medical Post-Graduate Committee for their annual subscribers to attend without fee. For others, the fee for attendance is £3 3s., and those wishing to attend are requested to notify Dr. R. Hayter, Honorary Secretary, Border Medical Association, North Street, Albury, as soon as possible. Telephone: Albury 557.

POST-GRADUATE CONFERENCE AT NEWCASTLE.

Gynaecology and Obstetrics.

The Post-Graduate Committee in Medicine in the University of Sydney announces that, in conjunction with the Central Northern Medical Association, the Gynaecological and Obstetrical Section of the 1958 Post-Graduate Conference will be held in the Lecture Theatre, Royal Newcastle Hospital on Saturday and Sunday, April 26 and 27, 1958. The programme is as follows:

Saturday, April 26: 2.30 p.m., registration; 2.45 p.m., "Some Recent Advances in Obstetrics and Gynaecology", Dr. S. Devenish Meares; 4.30 p.m., "Preeclamptic Toxaemia", Dr. R. D. Macbeth.

Sunday, April 27: 10 a.m., "Early Diagnosis of Cancer of the Female Genital Tract", Dr. S. Devenish Meares; 11.30 a.m., "Occipito-Posterior Positions", Dr. R. D. Macbeth.

The Medical Section will be held on August 16 and 17 and the Surgical Section on October 22 and 23. The combined fee for attendance will be £3 3s., or £1 1s. for each Section, and those wishing to attend are requested to notify Dr. J. N. Walker, Honorary Secretary, Central Northern Medical Association, 22 Church Street, Newcastle, as soon as possible. Telephone: Newcastle B 1201.

OTHER POST-GRADUATE WEEK-END CONFERENCES.

Wagga Wagga.—The Post-Graduate Committee in Medicine in the University of Sydney, in conjunction with the Southern Districts Medical Association, will hold a post-graduate conference at the Nurses' Home, Wagga Wagga Base Hospital, on Saturday and Sunday, April 26 and 27, 1958. The programme will be published shortly. Honorary Secretary: Dr. A. T. Woods, 69 Johnston Street, Wagga Wagga. Telephone: Wagga 3205.

Bathurst.—Please note that the Post-Graduate Conference at Bathurst will now be held on Saturday and Sunday, June 7 and 8, 1958, and not, as previously advertised, on April 26 and 27. A programme will be published shortly. Supervisor of Western District Medical Association: Dr. Brooke Moore, 142 William Street, Bathurst. Telephone: Bathurst 2345.

Tamworth.—Please note that the Post-Graduate Conference at Tamworth will now be held on Saturday and Sunday, June 7 and 8, 1958. A programme will be published shortly. President of Northern District Medical Association: Dr. G. B. Dance, 454 Peel Street, Tamworth. Telephone: Tamworth B 984.

The fee for attendance at the above courses is £3 3s., and those wishing to attend are requested to notify the respective Local Associations as soon as possible.

THE POST-GRADUATE GOLF CUP.

The Post-Graduate Committee in Medicine in the University of Sydney announces that the match this year will be a Stableford competition and will take place on Friday, May 9, 1958, at the Royal Sydney Golf Club, Rose Bay. The winner will be presented with a miniature of the cup. The following are eligible to compete: (a) post-graduate students attending the general revision course, 1958; (b) post-graduate students who have attended any course conducted by the Committee during the previous twelve months; (c) visiting lecturers; (d) members of the Post-Graduate Committee in Medicine and its sub-committees; (e) honorary medical officers and resident medical officers of hospitals participating in post-graduate work in New South Wales; (f) teachers in the Faculty of Medicine of the University of Sydney (this includes the members of the honorary medical staffs of all clinical schools); (g) members of the annual subscription course.

Application to compete should be made on the prescribed form, copies of which are available from the Committee, and should be lodged with the Course Secretary of the Committee, 131 Macquarie Street, Sydney, as soon as possible, but not later than Friday, April 25, 1958. The entry fee is £1 5s. (including lunch), or 12s. 6d. (without lunch), and must accompany the application.

DISEASES NOTIFIED IN EACH STATE AND TERRITORY OF AUSTRALIA FOR THE WEEK ENDED MARCH 22, 1958.¹

Disease.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Australian Capital Territory.	Australia.
Acute Rheumatism	1	2(1)	4(2)						7
Amoebiasis									..
Ancylostomiasis									..
Anthrax									..
Bilharziasis									..
Brucellosis		1							1
Cholera									..
Chorea (St. Vitus)									..
Dengue									..
Diarrhoea (Infantile)	9(2)	12(7)	8(1)						29
Diphtheria		2(2)							2
Dysentery (Bacillary)		3(1)	8(3)	2(2)	5(5)		2		15
Encephalitis	2	1							3
Filariasis									..
Homologous Serum Jaundice									..
Hydatid		1							1
Infective Hepatitis	42(19)	20(7)	9	8(8)	19(4)				68
Lead Poisoning									..
Leprosy									2
Leptospirosis			6						6
Malaria			1(1)						3
Meningoococcal Infection		1(1)	1(1)					1	2
Ophthalmia									..
Ornithosis		1(1)							1
Paratyphoid						1(1)			..
Plague									..
Poliomyelitis									..
Puerperal Fever			1						2
Hubbell		18(14)		1(1)	11(7)				30
Salmonella Infection				2(2)	2(2)				4
Scarlet Fever	6(3)	36(20)			2(2)	1(1)			46
Smallpox									..
Tetanus					1(1)				1
Trachoma					2(1)				2
Trichinosis									..
Tuberculosis	50(11)	18(16)	17(8)	5(2)	17(14)	2			105
Typhoid Fever	1(1)	2(2)	1(1)		1(1)				5
Typhus (Flea-, Mite- and Tick-borne)									..
Typhus (Louse-borne)									..
Yellow Fever									..

¹ Figures in parentheses are those for the metropolitan area.

British Medical Association.

NEW SOUTH WALES BRANCH.

THE following letter is published at the request of the Assistant Medical Secretary of the N.S.W. Branch of the B.M.A. It is the reply of the President of the Branch to the letter of the N.S.W. Minister for Health published in the issue of March 29, 1958.

[COPY.]

The Honourable W. F. Sheahan, Q.C., LL.B., M.L.A., Minister for Health, 52 Bridge Street, Sydney.

Dear Mr. Minister,

I have your letter of 14th March, 1958, dealing with the request of the New South Wales Branch of the British Medical Association that a longer time be allowed for it to make representations to the Committee, appointed by the Government, to report upon the establishment of a second medical school.

May I say with all respect that I feel that the peremptory tone of your reply is much to be regretted, since medical education is not a subject that should be hurriedly considered.

Its importance is such that this Association intends to continue with its study of undergraduate, graduate and post-graduate medical education in all respects, not merely the aspect of a new medical school. And the report of the Government Committee cannot be comprehensive if it does not regard the views of that Association which is truly representative of the medical profession. It would be impossible for the Association to prepare an adequate report in so short a time as the Government allowed.

Any suggestion, as reported in today's Press, that the Association had boycotted the Government's Committee is altogether unfounded, untrue and misleading. The Association's willingness to cooperate with the Government Committee is indicated by its earlier request to you for representation, which request was refused.

Personalities have been referred to in the statement published in today's Press, but I can assure you most definitely that the Association is in no way concerned with any personality in this matter.

If some leading doctors have been unwilling to join the Committee, as reported in the Press, that has not been due to any action on the part of the Association. It may be that they regard the Committee as a means of implementing Government policy rather than of dispassionately studying the needs of medical education.

May I point out further that medical education, as such, was never discussed by the Murray Committee and is not dealt with in its report. Neither did the Victorian Branch of the British Medical Association make any submissions on that subject to the Murray Committee, but only on the question of quotas of students.

The Dean of the Faculty of Medicine, Professor Bruce T. Mayes, is reported as having stated that in his opinion it would be ten years before a doctor could be graduated from a second medical school. Why then should a hasty decision on the question of a second medical school be desirable before the larger subject of medical education is fully studied?

It is interesting to note the reported statement by Mr. R. Maher, M.L.A., that Sydney's second medical school should be attached to the Royal North Shore Hospital, and that the University of Technology was unsuitable to maintain the classical tradition of the medical school at the University of Sydney. There will, no doubt, be many who will support this view even though fully cognisant of the Murray Report. This Association certainly would not wish, as your letter suggests, that for its own convenience the Government's programme for 1958 should be lightly disturbed. But the subject of medical education is a very wide one, and requires detailed investigation. Any report which is based on inadequate information and investigation will not be accepted by the medical profession, or indeed by the community as a whole, as authoritative.

Faithfully yours,

G. L. Howe,

President.

March 20, 1958.

Medical Appointments.

Dr. P. H. Cohen, Dr. A. Kessell, Dr. R. F. Somerset and Dr. A. Luntz have been appointed medical officers in the Mental Hygiene Branch, Department of Health, Victoria.

Deaths.

THE following death has been announced:

DENNERSTEIN.—Nathan Dennerstein, on March 21, 1958, at South Yarra, Victoria.

Diary for the Month.

APRIL 12.—Queensland Branch, B.M.A.: Convocation.

APRIL 15.—New South Wales Branch, B.M.A.: Medical Politics Committee.

APRIL 16.—Western Australian Branch, B.M.A.: General Meeting.

APRIL 17.—New South Wales Branch, B.M.A.: Clinical Meeting.

APRIL 18.—Victorian Branch, B.M.A.: Executive Meeting.

APRIL 18.—New South Wales Branch, B.M.A.: Ethics Committee.

APRIL 22.—New South Wales Branch, B.M.A.: Hospitals Committee.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.I.

New South Wales Branch (Medical Secretary, 135 Macquarie Street, Sydney): All contract practice appointments in New South Wales. Anti-Tuberculosis Association of New South Wales.

South Australian Branch (Honorary Secretary, 80 Brougham Place, North Adelaide): All contract practice appointments in South Australia.

Editorial Notices.

ALL articles submitted for publication in this Journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words or phrases.

References to articles and books should be carefully checked. In a reference the following information should be given: surname of author, initials of author, year, full title of article, name of journal, volume, number of first page of the article. The abbreviations used for the titles of journals are those adopted by the Quarterly Cumulative Index Medicus. If a reference is made to an abstract of a paper, the name of the original journal, together with that of the journal in which the abstract has appeared, should be given with full date in each instance.

Authors submitting illustrations are asked, if possible, to provide the originals (not photographic copies) of line drawings, graphs and diagrams, and prints from the original negatives of photomicrographs. Authors who are not accustomed to preparing drawings or photographic prints for reproduction are invited to seek the advice of the Editor.

Original articles forwarded for publication are understood to be offered to THE MEDICAL JOURNAL OF AUSTRALIA alone, unless the contrary is stated.

All communications should be addressed to the Editor, THE MEDICAL JOURNAL OF AUSTRALIA, The Printing House, Seamer Street, Glebe, New South Wales. (Telephones: MW 2651-2-3.)

Members and subscribers are requested to notify the Manager, THE MEDICAL JOURNAL OF AUSTRALIA, Seamer Street, Glebe, New South Wales, without delay, of any irregularity in the delivery of this Journal. The management cannot accept any responsibility or recognise any claim arising out of non-receipt of journals unless such notification is received within one month.

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